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Connections Network Design Methodology

November 2024

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How to read this document

Welcome to our **Connections Network Design Methodology (CNDM) document**. This document provides an overview of our approach to reassessing the connections queue and assessing new Gate 1 and Gate 2 applications under the reformed connections process, TMO4+.

Chapters 1 to 3 provide an overview of the purpose of the CNDM, the process it describes and the Framework Objectives and building blocks that underpin it. The full document provides further detail on the process and either explains the steps or refers to other related TMO4+ methodologies and guidance documents.

This document is the first version of the CNDM, that explains the connections assessment and design processes for TMO4+ both for **new applications and existing applications which have met the Gate 2 criteria.**

This document will be reviewed and updated in line with the relevant NESO licence conditions.

Please note any reference to Distribution Network Operators (DNOs) within this document refers to both DNOs and Transmission Connected Independent Distribution Network Operators (IDNOs).

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01. Introduction

This section introduces the purpose of the Connections Network Design Methodology

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1.1 Purpose

1.1.1 This methodology, along with the Gate 2 Criteria Methodology and the Project Designation Methodology, underpin the reformed connections process known as TMO4+, and supplement the process that will be outlined in the Connection and Use of System Code (CUSC) and System Operator Transmission Owner Code (STC).[1]

1.1.2 The purpose of the Connections Network Design Methodology is to provide an overview of the process that NESO and Transmission Owners (TO) are following when assessing applications to connect generation, storage and transmission connected demand that have met the Gate 1 Criteria or the Gate 2 Readiness Criteria.

1.1.3 This methodology will be followed by NESO, TOs and DNOs as we undertake the connections network design activities for reviewing existing connections and for assessing new applications in the inaugural application window.

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[1] Inclusion in CUSC and STC is subject to ongoing code modifications CMP434 and CM095 (Implementing Connections Reform) and CMP435 (Application of Gate 2 Criteria to existing contracted background)

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02. Connections Network Design Methodology: Definition, Framework Objectives and Scope

This section introduces the purpose of the Connections Network Design Methodology

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2.1 Definition: Connections Network Design Methodology

What do we mean by the CNDM?

"The Connections Network Design Methodology describes how relevant generation and demand connections will be assessed and strategically designed in alignment with wider network planning activities."

It defines the process by which NESO and the TOs will undertake a technical assessment of connection applications and determine:

- the indicative connection date and indicative connection location included in a Gate 1 offer
- the connection date and connection point included in a Gate 2 offer, or the reserved connection date and connection point included in a Gate 1 offer for eligible projects
- opportunities for connections-related anticipatory investment

The methodology also:

- describes the approach being taken to apply the Gate 2 criteria to the existing queue, and how existing and transitional connections projects will be assessed for advancement where this is requested (relevant to the one-off "Gate 2 to Whole Queue" exercise only)
- describes how capacity will be reallocated to other projects following termination or Gate 2 offer rejection
- describes how the connection design processes will interact with Government and NESO strategic energy plans
- signposts to other relevant documentation about strategic energy planning and the reformed connections process
- outlines the approach for the review and revision of future versions of the CNDM.

2.2 CNDM: Framework Objectives

2.2.1 Five Framework Objectives have been developed to underpin the CNDM and the connection assessment processes outlined within. These are shown in Figure 1 below and are to be considered on an equal footing.

2.2.2 Ofgem will consult on NESO and TO licence obligations, and these objectives will be updated where necessary in accordance with those obligations.

Safety & Security of Supply	• Produces a network design that is safe and reliable
Economic, Efficient and Sustainable	• Enables the coordinated assessment of connections, resulting in an economic and efficient system and savings for end consumers • Facilitates contestability and competition for design and delivery of connection infrastructure, encouraging innovation and creating benefits through capital and operational cost savings • Considers environmental and community impacts and aims to minimise or mitigate these in the network design
Transition to Net Zero	• Helps to facilitate the delivery of the Clean Power 2030 Action Plan (CP30 Plan) • Is future-proofed to enable alignment with future strategic plans such as the Centralised Strategic Network Plan (CSNP), Strategic Spatial Energy Plan (SSEP) and Regional Energy Strategic Plan (RESP)
Deliverability & Operability	• Provides the greatest opportunity for earlier connection dates for viable, net zero aligned generation and demand projects across Great Britain • Facilitates the connection of strategic projects to generate important system characteristics
Consistency & Transparency	• Promotes consistency between TOs yet respects their independence and appropriately takes account of differences between networks • Provides customers with insight as to how connection projects are assessed and the opportunity to collaborate on shaping the future of the network

Figure 1: CNDM Framework Objectives

2.3 What is in scope of the CNDM? (1/3)

2.3.1 The below table provides an overview of what is in scope of the CNDM

In scope	Description
2025/2026 scope	
Application of Gate 2 criteria to the existing connections queue	**Documenting the approach that NESO, TOs and DNOs will follow to align the existing queue to the Gate 2 criteria, and reassess projects to determine updated connection dates, points of connection and reinforcement works.** • Revision of the queue when the Gate 2 Readiness criteria are applied retrospectively, and projects are removed from the queue • Aligning the queue to the CP30 Plan • Treatment of Designated Projects, relevant embedded generation, transmission connected demand, and Gate 1 Connection Point and Capacity Reservations • Reservation for undersupply against the CP30 Plan • Reassessment of existing contracted projects and consideration of advancement and point of connection change requests • Approach to TO studies and identification of reinforcement works • Gate 2 offers, including variations for offers of advancement
Gate 1 Assessment (new applications and significant mod apps)	**Documenting the approach that NESO and TOs will follow to produce Gate 1 offers and identify anticipatory investment.** • Purpose of a Gate 1 offer • Approach to determining indicative connection dates and connection locations • Connection point and Capacity Reservation for selected Gate 1 projects • Anticipatory Investment at Gate 1

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2.3 What is in scope of the CNDM? (2/3)

In scope	Description
2025/2026 scope	
Gate 2 Assessment (new applications and significant mod apps)	**Documenting the approach that NESO, TOs and DNOs will follow to align each Gate 2 Tranche to the Gate 2 Strategic Alignment Criteria, and assess projects to determine connection dates, point of connection and reinforcement works.** • Aligning the Gate 2 Tranche to the CP30 Plan • Treatment of Designated Projects, relevant embedded generation, transmission connected demand, and Gate 1 Connection Point and Capacity Reservations • Utilising existing reservations for undersupply • Assessment to determine a connection date and connection point for each project at Gate 2 • Approach to TO studies and identification of reinforcement works • Design Variations, derogations, competition and contestability and bay allocation • Approach to reallocating capacity when 2030 pathway projects and 2035 pathway projects exit the queue

2.3 What is in scope of the CNDM? (3/3)

In scope	Description
2025/2026 scope	
Interactions with other Strategic Energy Planning Processes	• Interactions between the CNDM and CP30 Plan • Interactions between the CNDM and SSEP • Interactions between the CNDM and Transitional Centralised Strategic Network Plans (tCSNP)
Roles and Responsibilities	• Roles and responsibilities of NESO under the CNDM • Roles and responsibilities of TOs under the CNDM • Roles and responsibilities of DNOs under the CNDM • Roles and responsibilities of Transmission Connected IDNOs under the CNDM
Beyond 2026 - Enduring scope	
Interactions with Strategic Energy Planning Processes	The following topics are out of scope of this initial version of the CNDM, but will feature in future iterations of the CNDM once these interactions are better understood: • Interactions between the CNDM and CSNP • Interactions between the CNDM and RESP

2.4 What policy and publications does the CNDM refer to? (1/2)

The below table provides links to existing publications and policy documents which are referenced within this document.

Existing Policy	Description
Gate 2 Criteria Methodology	The Gate 2 Criteria Methodology sets out the two parts of the Gate 2 Criteria; the Gate 2 Readiness Criteria and the Gate 2 Strategic Alignment Criteria. It also explains how Users evidence they have met the Gate 2 Readiness Criteria, and how such evidence is assessed.
Project Designation Methodology	The Project Designation Methodology explains the reasons projects could be designated, sets out the criteria for designation and the process by which NESO will designate projects.
Clean Power 2030 Report	NESO has provided advice to Government on achieving Clean Power by 2030 via our Clean Power 2030 Report.
Queue Management	Queue Management was introduced following the implementation of CUSC Modification CMP376. The current Queue Management Guidance will be updated ahead of connections reform go-live.
Technical Limits	The introduction of Grid Supply Point (GSP) Technical Limits is an initiative developed as part of the ENA's 3-Point Plan, working to accelerate the connection of generation and storage into the distribution network ahead of the required transmission reinforcement works.
Security and Quality of Supply Standard (SQSS)	The SQSS sets out the criteria and methodology for planning and operating the National Electricity Transmission System (NETS): SQSS Code Documents.
Connection and Infrastructure Options Note (CION)	The CION Process was previously used to assess and record the rationale for the selection of the overall preferred connection option for the onshore connection point and offshore transmission system design, for relevant offshore projects. This process is under review and will be revised or replaced ahead of connections reform go-live.

2.4 What policy and publications does the CNDM refer to? (2/2)

The below table provides links to future publications and policy documents which are referenced within this document.

Future Policy	Description
Clean Power 2030 Action Plan (CP30 Plan)	Government's CP30 Plan is expected later this year.
Strategic Spatial Energy Plan (SSEP)	On 22nd October NESO were commissioned to deliver SSEP. The commission we received from UK, Scottish and Welsh Governments is available on the Department for Energy Security and Net Zero's website.
Transitional Centralised Strategic Network Plan (tCSNP)	We published the tCSNP2 in March 2024, also known as the Beyond 2030 report. This is currently being refreshed and will be published in early 2026, ahead of the first enduring CSNP.
Centralised Strategic Network Plan (CSNP)	The Centralised Strategic Network Plan will provide an independent, coordinated, and long-term approach to network planning in GB to help achieve its net zero ambition. See our Network Planning Review page for more information.
Connect and Manage Guidance	How the range of works required for a connection are categorised as Enabling and Wider works will be covered in the Connect and Manage Guidance, which is to be updated and published ahead of connections reform go-live.
Gated Modification Guidance	The Gated Modification Guidance will set out the types of changes which qualify as a 'Gated' Modification and thereby require a Modification Application to be submitted as part of the Primary Process (i.e. at the next relevant application window). It will be published ahead of connections reform go-live.
Material Technology Change Guidance	The Material Technology Change Guidance will set out NESO's process for managing requests for technology changes made via Gated Modification Applications. It will be published ahead of connections reform go-live.

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03. Connections Network Design process steps

This section provides a visual representation of how the CNDM building blocks reflect the TMO4+ process.

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3.1 Connections Network Design (CND) process steps

3.1.1. This inaugural CNDM sets out how queue formation and network design will be undertaken for those applying to connect in the first gated application window as well as those in the existing queue who meet the Gate 2 criteria.

3.1.2 The reassessment of the existing queue is known as **the Gate 2 to Whole Queue** exercise and is a one-off activity.

3.1.3 This document also sets out how the connections network design process will interact with the **CP30 Plan** and **SSEP** to ensure that the generation and demand pathways identified through these are considered when assessing connection applications.

3.1.4 In future versions of the CNDM, these will be updated to include interactions with other regional and central network plans such as the **RESP** and **CSNP.**

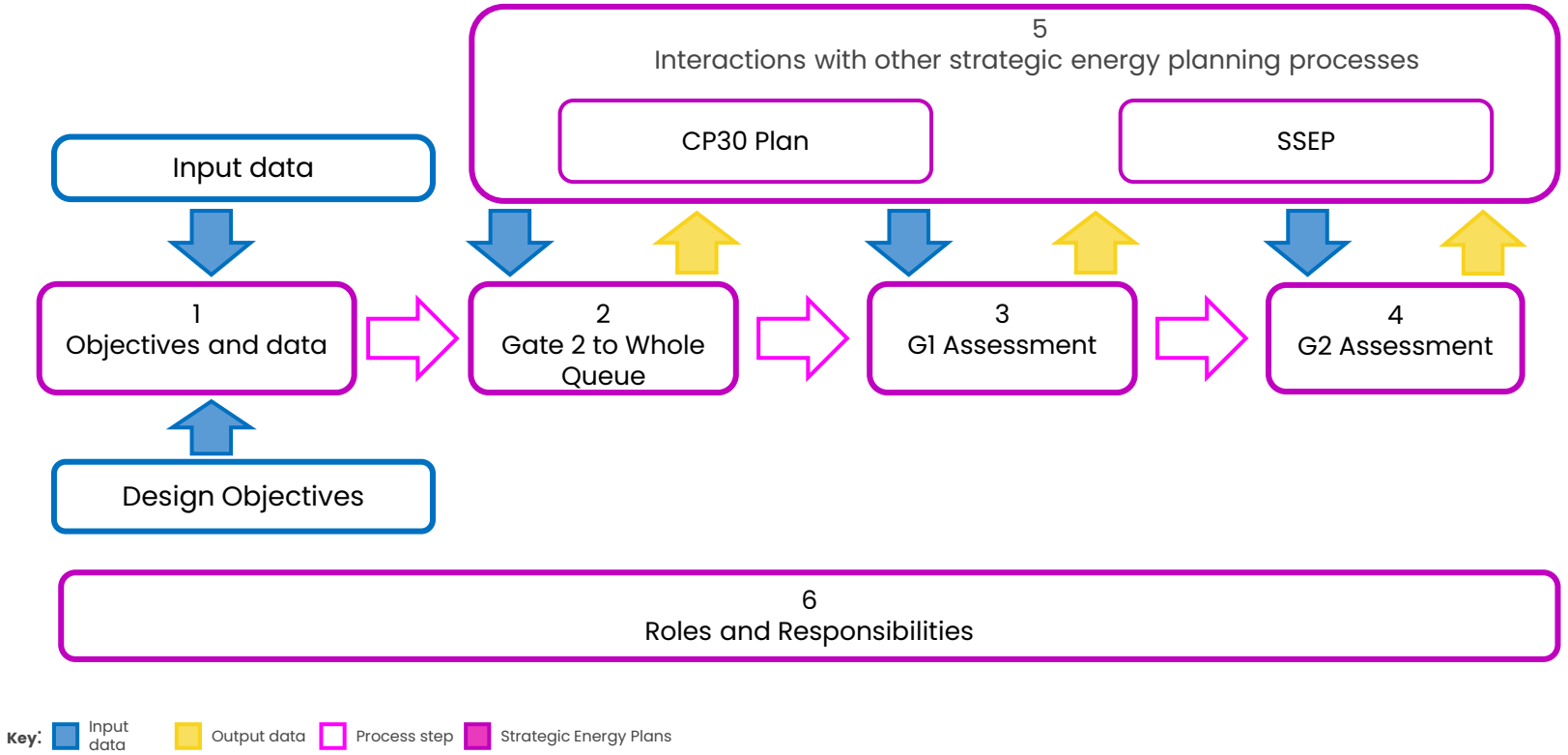

Figure 2: CND Process Overview

3.2 CNDM Building Blocks

Design Objectives and Data	The scope of the connections network design is established with setting the design objectives, the supporting business processes and the data inputs required to assess connections applications.	
Gate 2 to Whole Queue	Defines the process & principles for reassessing the queue once the Gate 2 Criteria have been applied.	***One off activity***
Gate 1 Assessment	Defines the process and the principles for determining indicative date & location and anticipatory investment triggered by Gate 1 projects, and the process for reserving a connection point and capacity for selected projects.	
Gate 2 Assessment	Defines the enduring process and principles for producing full connection offers for projects that have met the Gate 2 Criteria.	
Interactions with Strategic Energy Plans	Defines how Gate 1 and Gate 2 assessments will interact with Government and NESO plans such as the CP30 Plan, SSEP, tCSNP, CSNP and RESP.	***CSNP and RESP not yet within CNDM scope***
Roles and Responsibilities	Defines the different roles and responsibilities between NESO, TOs and DNOs when assessing Gate 1 and Gate 2 applications and determining connection dates and reinforcement works.	

Figure 3: CNDM Building Blocks

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04. Connections Network Design data inputs

This section defines the data inputs that feed into the overall Connections Network Design process.

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4.1 Defining objectives and data inputs

4.1.1 Figure 4 shows this initial step in the context of the overall Connections Network Design (CND) process.

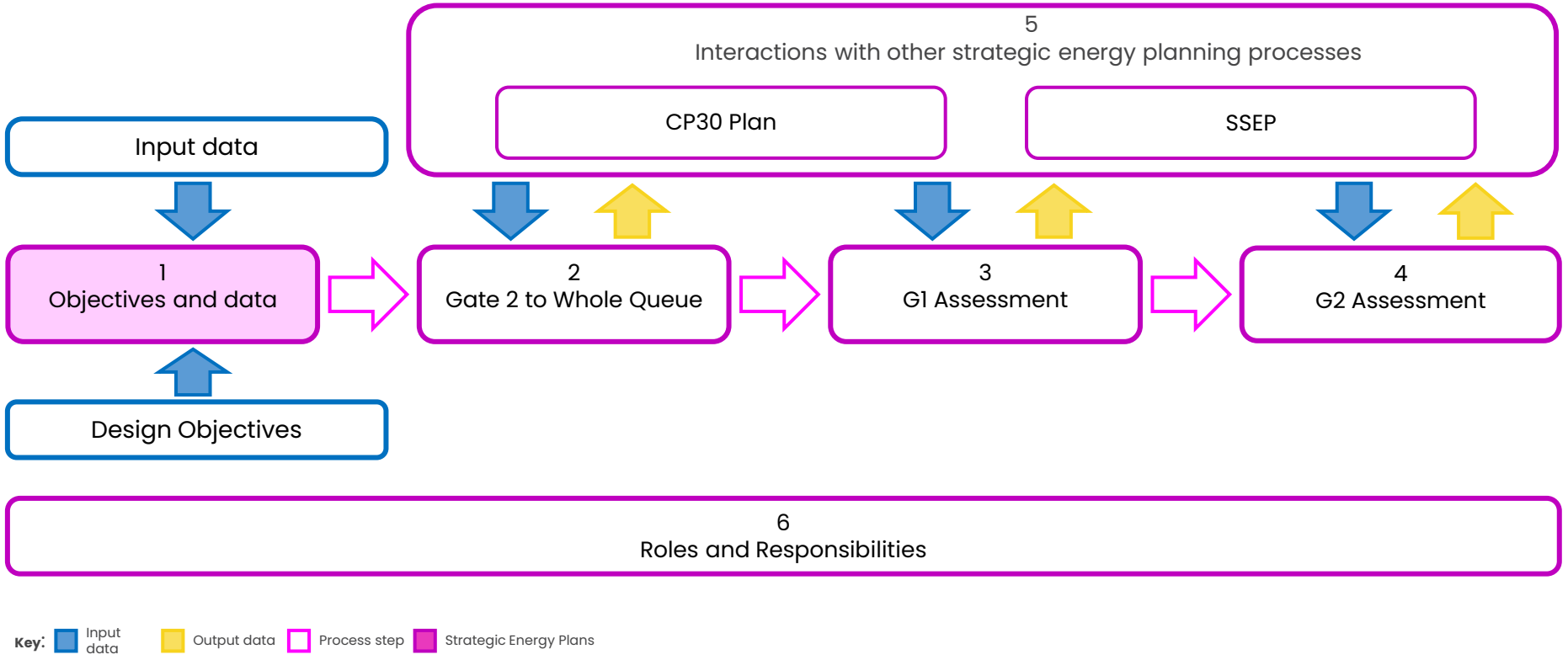

Figure 4: Objectives and Data in the CND process

4.2 Establishment of CND data sets (1/2)

4.2.1 The first step in assessing Gate 1 and Gate 2 applications is to establish the required data sets. This includes determining the connections projects in scope of the assessment and developing a suitable generation and demand background on which they can be studied.

4.2.2 Sections 4.2.3 to 4.2.5 outline the data requirements for the Gate 2 Strategic Criteria alignment and technical assessment of connection applications. This does not include the assessment (and associated data sets) for alignment to the Gate 2 Readiness Criteria.

4.2.3 The following data sets are required to facilitate the reassessment of the existing contracted background (i.e. Gate 2 to Whole Queue):

- List of projects that have met the Gate 2 Readiness Criteria
- List of projects that have been designated
- CP30 Plan pathways, with zone, technology, and Transmission/Distribution breakdowns
- Latest network background (i.e. latest tCSNP outputs)
- For each project:
    - Technology type
    - Project development status
    - Scheme Briefing Note (SBN)/Data Registration Code (DRC) data
    - Original queue position (or signature date for transitional agreements)
    - Current contracted connection date
    - Current contracted capacity
    - Current Point of Connection (PoC) and requested PoC (where applicable)
    - Advancement request data (where applicable)
    - Construction Planning Assumptions (CPAs)
- Additional requirements for relevant embedded projects:
    - Reference of original project progression
    - Date project progression was countersigned by NESO

4.2 Establishment of CND data sets (2/2)

4.2.4 The following data sets are required to facilitate the assessment of new Gate 1 applications:

- List of projects that have met Gate 1 criteria
- Subset of these projects that are eligible for connection point and capacity reservation
- For each project:
    - SBN/DRC data

4.2.5 The following data sets are required to facilitate the assessment of new Gate 2 applications and projects that are selected for connection point and capacity reservation:

- CP30 Plan pathways, with zone, technology, and Transmission/Distribution breakdowns
- Detail of reservations made for undersupply
- List of projects that have met Gate 2 Readiness Criteria
- List of projects that have been designated
- List of projects that have exited the queue since the last Gate 2 assessment
- List of projects that rejected offers in the previous Gate 2 (or Gate 2 to Whole Queue) window
- For each project:
    - Technology type
    - Date Gate 2 Readiness Criteria met
    - SBN/DRC data
    - Construction Planning Assumptions (CPAs)

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05. Gate 2 to Whole Queue Assessment

This section provides an overview of how the queue will be reordered when the Gate 2 criteria are applied retrospectively, and how projects will be reassessed for potential advancement.

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5.1 Gate 2 to Whole Queue

5.1.1 Figure 5 shows the Gate 2 to Whole Queue exercise in the context of the overall CND process.

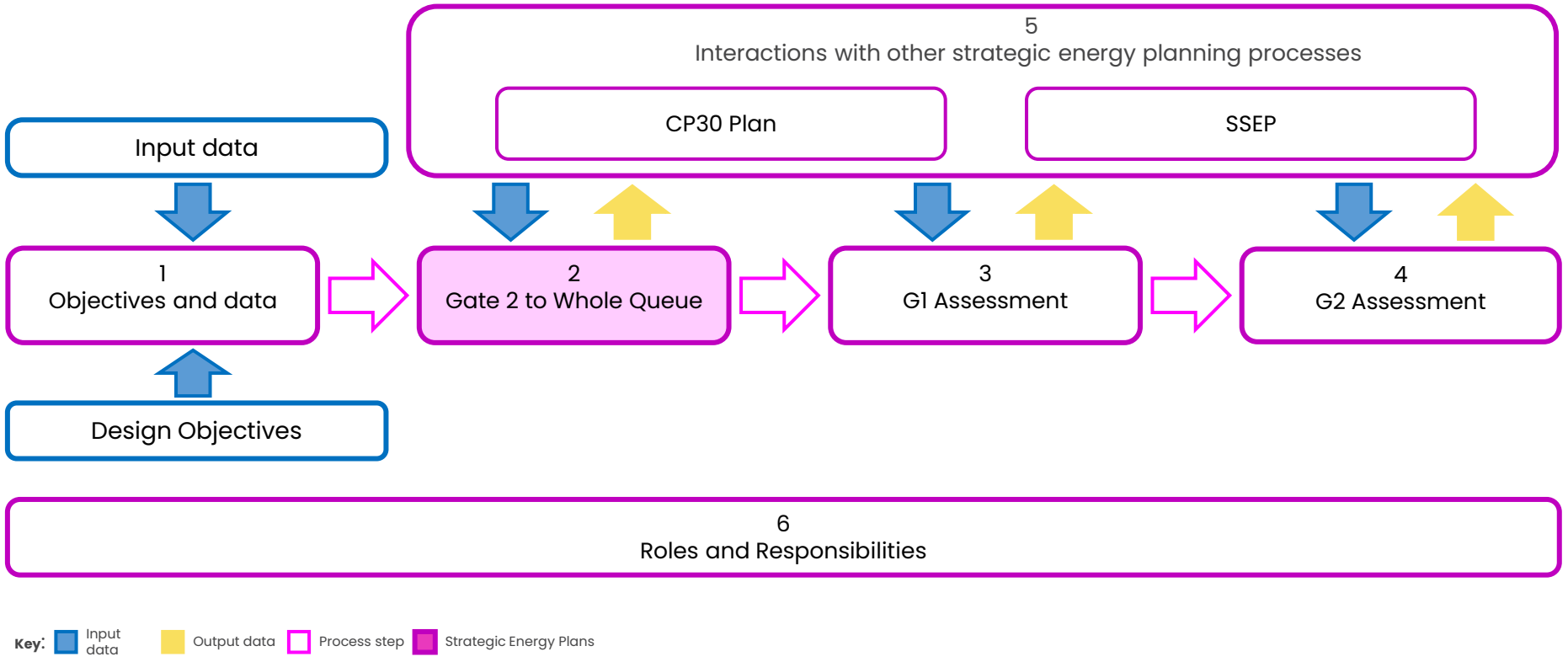

Figure 5: Gate 2 to Whole Queue in the CND process

5.2 Application of the Gate 2 Criteria to the existing queue

5.2.1 The application of the Gate 2 Criteria to the existing queue will be conducted in stages as shown in Figure 6. Firstly, the Gate 2 Readiness Criteria will be applied to all projects. Projects which are selected for Connection Point and Capacity Reservation will also be retained.

5.2.2 Projects in the queue will then be assessed against the Gate 2 Strategic Alignment Criteria. For technologies specified in the CP30 Plan, NESO will initially determine which projects align to the **2030** pathway(s). Alignment to the **2035** pathway will then be determined for the projects that remain.

5.2.3 Definitions of the Gate 2 Readiness Criteria and the Gate 2 Strategic Alignment Criteria can be found in the **Gate 2 Criteria Methodology.**

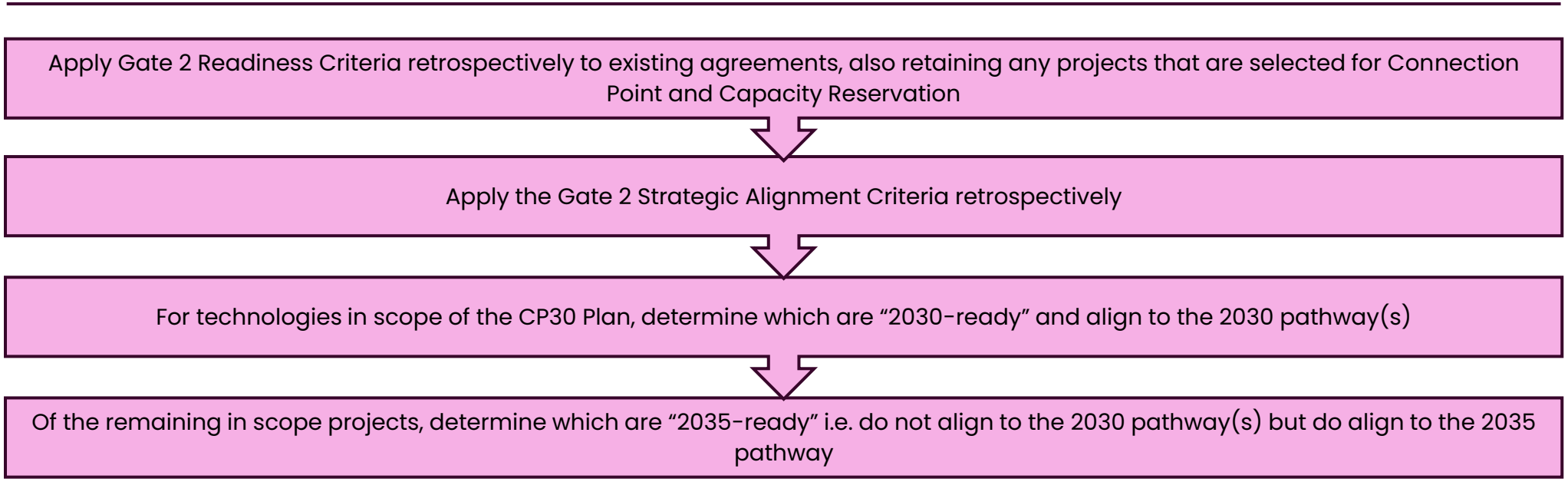

Figure 6: Stages of applying the Gate 2 Criteria to the existing queue

5.3 Application of the Gate 2 Readiness Criteria to the existing queue

5.3.1 The existing connections queue is GB-wide and each contracted project has a queue position based on the date their agreement was countersigned by NESO. The revised queue position of relevant embedded generation in the GB-wide queue will be determined based on the Project Progression they were included in, and the date this was countersigned by NESO.

5.3.2 For the Gate 2 to Whole Queue exercise, the 'Pre-TMO4+ queue' will also include transmission connected demand projects, as well as projects with transitional agreements applied for on or after 2nd September 2024 (Step 1 in Figure 7).

5.3.3 Projects which have met the Gate 2 Readiness Criteria will progress to the next assessment stage (Step 2 in Figure 7).

5.3.4 Any projects which have not met the Gate 2 Readiness Criteria but are selected for Connection Point and Capacity Reservation will also progress to the next assessment stage (Step 3 in Figure 7).

5.3.5 All other projects which have not met Gate 2 readiness criteria will be removed from the queue (Step 4 in Figure 7). This will leave capacity 'gaps' which will later be redistributed amongst other projects.

5.3.6 The remaining projects will be "bunched up" to close the gaps in the queue (Step 5 in Figure 7). At this stage, these projects will retain their relative queue position i.e. projects will not skip over one another to fill gaps.

5.3.7 From this point, the projects which align to the Gate 2 Strategic Alignment Criteria can be determined.

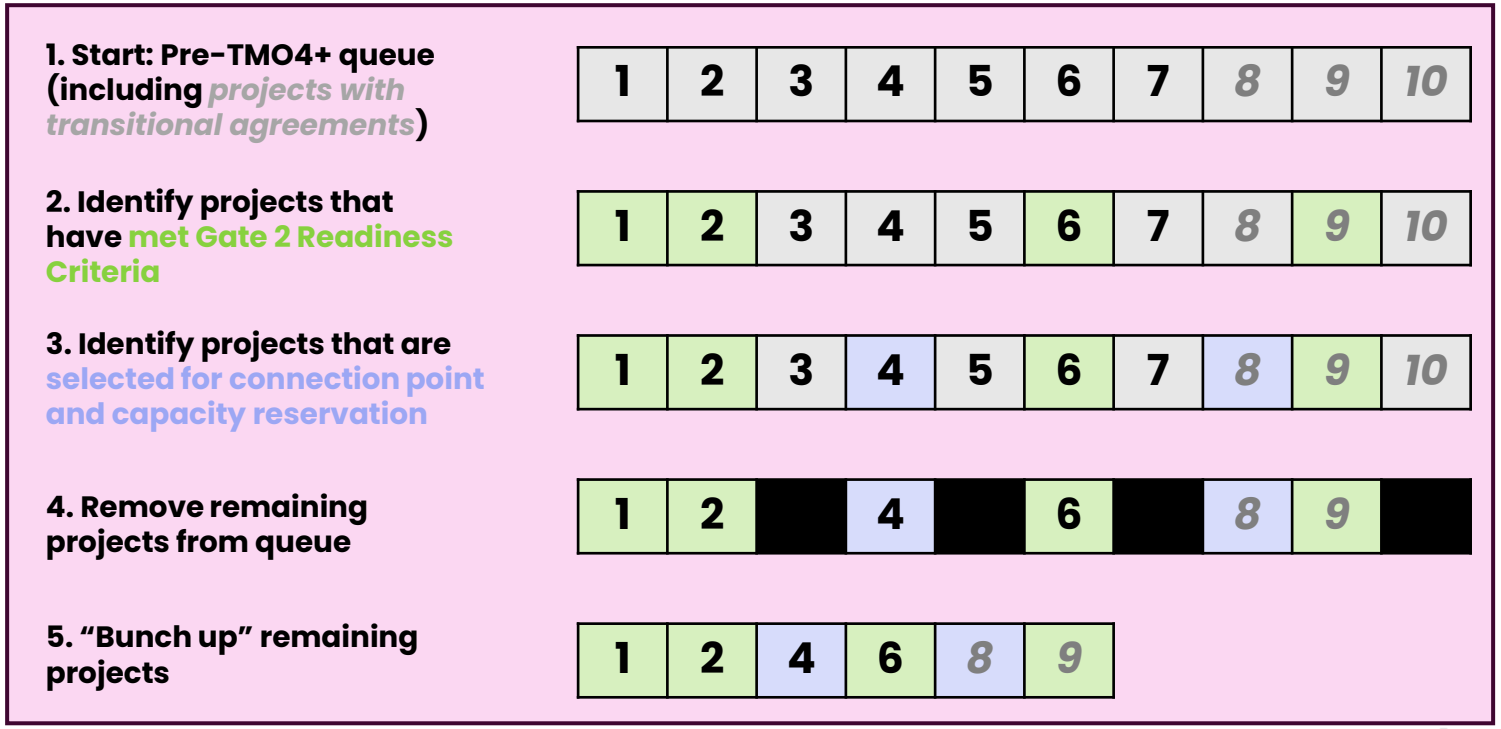

Figure 7: Applying Gate 2 Readiness Criteria to the existing queue

5.4 Application of the Gate 2 Strategic Alignment Criteria to the existing queue (1/2)

5.4.1 Once the Gate 2 Readiness Criteria have been applied to the existing queue and the queue revised as shown in Section 5.3, the projects that remain will be assessed against the Gate 2 Strategic Alignment Criteria.

5.4.2 Projects will meet this criteria by either:

a) aligning to the pathways within the CP30 Plan
b) being designated as described in the **Project Designation Methodology**, or
c) if they are transmission connected demand projects that are not within scope of the CP30 Plan

See the **Gate 2 Criteria Methodology** for more information on these.

5.4.3 Our **Clean Power 2030 Report** recommends that the CP30 Plan sets out pathways from now to 2030 and a pathway from 2031 to 2035. We are proposing that the 2031 to 2035 pathway (hereafter referred to as the '2035 pathway') should be based on the Holistic Transition scenario within our Future Energy Scenarios 2024 (FES24) to 2035.

5.4.4 The MW capacity needed of each technology type to align to these pathways will be outlined for each zone of the network. It is possible that some technologies, e.g. offshore projects, may have fewer zones, or perhaps even only a single GB wide zone, but this will be for Government to determine.

5.4.5 NESO expect the zonal division of the Transmission network to be outlined in the CP30 Plan. The CP30 pathways will differentiate between Transmission and Distribution connections, with the zones for distribution aligning to the Distribution Network Operator (DNO) network boundaries.

5.4 Application of the Gate 2 Strategic Alignment Criteria to the existing queue (2/2)

5.4.6 To determine alignment to the pathways, 'zonal sub-queues' per technology will be formed. The alignment will be conducted in such a way that the zonal sub-queues will remain harmonised with the GB-wide queue, i.e. after alignment is conducted, the projects in zonal sub-queues will all have their place in the GB-wide queue relative to projects in other zones.

5.4.7 Where the CP30 Plan outlines a MW range for the pathways, rather than a discrete MW figure, NESO will use the high end of that range to determine initial alignment to the pathways. For example, if the range in a location is 4-5 GW of a specific technology, NESO would set the pathway at 5 GW for that technology in that location.

5.4.8 This alignment will also consider the advancement requests permitted as part of the Gate 2 to Whole Queue evidence submission. There are several conditions to consider when requesting advancement, to ensure that these requests are reasonable and that Users requesting advancement only apply where they are confident they can deliver to expedited timescales. See Section 5.22 for more information.

5.4.9 Section 5.7 shows an example of how we will identify eligible projects and evaluate them against the 2030 and 2035 pathways.

5.5 Aligning the queue to the 2030 pathway(s)

5.5.1 All projects which indicate that they are able to connect in 2030 or earlier will be considered against the 2030 pathway(s) for their technology type, in their zone of the network. Eligible projects include those which have met the Gate 2 Readiness Criteria (or are selected for Connection Point and Capacity Reservation) and either:

a) Have a contracted connection date of 2030 or earlier
b) Have a contracted connection date of 2031 or later, and request advancement to 2030 or earlier, or
c) Have a transitional agreement and request a connection date of 2030 or earlier

5.5.2 For the contracted connection date to be a reliable metric in determining alignment to the 2030 pathway(s), and to maximise likelihood of a similar or improved date as an outcome of the Gate 2 to Whole Queue exercise, **we will maintain the existing relative queue positions of projects that remain in the queue**. This is intended to reduce cases for example of larger projects 'skipping' smaller projects in the queue, resulting in the smaller projects being delayed behind more significant works and potentially putting their existing contracted (2030 or earlier) date at risk.

5.5.3 For the period up to and including 2030, our CP30 Report has found that delivering the already planned wider transmission network for 2030 should enable us to achieve Clean Power by 2030. Maintaining existing relative queue positions will therefore minimise the changes required to this plan as a result of reassessment, and help to maximise utilisation of both the existing network and planned build ahead of 2030.

5.5.4 The planning status of projects will also influence which projects align to the 2030 pathway(s). Projects will be sorted by planning status to determine alignment to the CP30 Plan, and then reordered in their original relative queue positions before being restudied. Section 5.7 shows an example of how this would be conducted for one technology in one zone.

5.5.5 NESO will ensure that projects which have met the Gate 2 criteria and are already under construction and due to commission in 2026 or earlier will not be adversely impacted by aligning the queue to the CP30 Plan.

5.6 Aligning the queue to the 2035 pathway

5.6.1 Once the projects aligned with the 2030 pathway(s) have been identified, the remaining projects will be considered against the 2035 pathway.

5.6.2 All projects which indicate that they are able to connect in 2035 or earlier will be considered against the 2035 pathway for their technology type, in their zone of the network. Eligible projects include those which have met the Gate 2 Readiness Criteria (or are selected for Connection Point and Capacity Reservation) and either:

a) Have a contracted connection date of 2035 or earlier
b) Have a contracted connection date of 2036 or later, and request advancement to 2035 or earlier
c) Have a transitional agreement and request a connection date of 2035 or earlier; or
d) Met one of the three eligibility criteria in 5.5.1, but did not align with the 2030 pathway(s)

5.6.3 For the avoidance of doubt, where a User with a contracted connection date of 2036 or later does not request advancement to 2035 or earlier, their project will not be considered for alignment to the 2035 pathway. The exception to this is any project that is Designated under the 'Very long lead times' category, that is seeking connection beyond 2035.

5.6.3 Within this time horizon, there will also be a combination of 'ready' projects that have a 2031-2035 connection date from pre-TMO4+, along with some projects which were due to connect earlier but did not align to the 2030 pathway(s). Consequently, the programme of works required to connect these projects will likely require more revision than the works between now and 2030. There is also a greater opportunity to optimise the programme of works for this period, as less of this work will already be underway and so there is more time to replan and procure necessary assets.

5.6.4 As such, preservation of original relative queue order within this period is less critical. We also believe it is not reasonable to use planning status as a readiness metric for the 2031-2035 period, as some of these projects will not be connecting for several years and therefore should not be expected to have already obtained planning.

5.6.5 Projects which align to the 2035 pathway will have been placed later in the queue than projects which align to the 2030 pathway(s), as part of the queue reordering activity outlined in Section 5.7. As a result, these projects may have been moved back in the queue, and therefore may receive a later connection date than their original date.

5.7 Aligning the queue to the CP30 pathways (1/2)

5.7.1 Following the application of the Gate 2 Readiness Criteria, the below process will be used to align the remaining projects to the CP30 pathways:

1. Form a sub-queue for each technology in each zone (e.g. short duration storage in Zone 1).

2. Remove those with existing connection dates after 2030 that have not requested advancement to 2030 or earlier and add to Phase 2.

3. Determine planning status of remaining projects.

4. Order queue based on planning status.

5. Determine point where 2030 pathway(s) reached. Add projects exceeding the pathway(s) to Phase 2.

6. Relevant TO/DNO identify any network limitations preventing advancement (prior to detailed network study).

7. Return Phase 1 projects to original relative queue positions.

8. Determine point in Phase 2 queue where 2035 pathway reached. Any exceeding the pathway will not receive a Gate 2 offer.

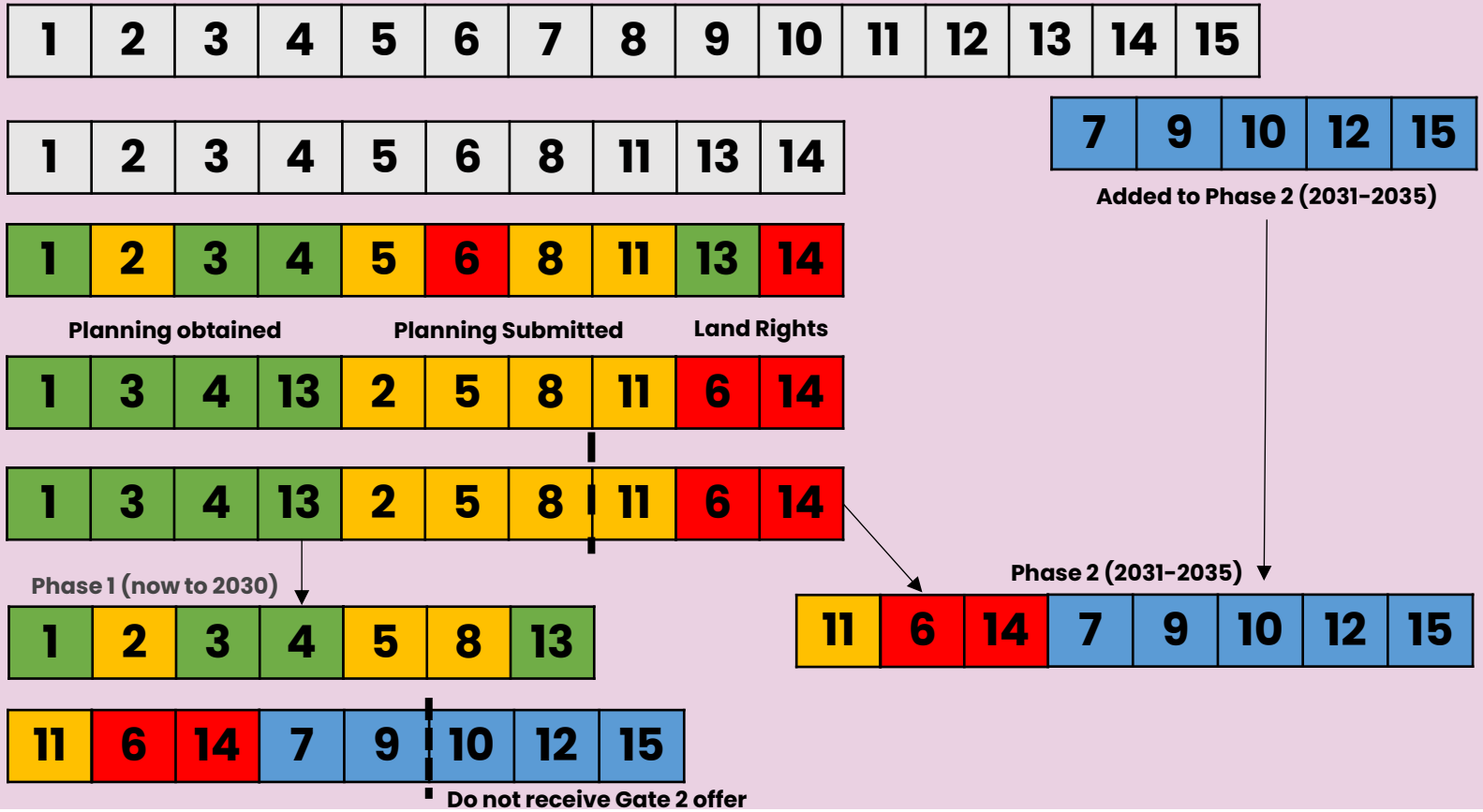

Figure 8: Aligning the queue to the CP30 pathways

5.7 Aligning the queue to the CP30 pathways (2/2)

5.7.1 As stated in Section 5.5.5, NESO will ensure that projects which have met the Gate 2 Criteria and are already under construction and due to commission in 2026 or earlier will not be adversely impacted by aligning the queue to the CP30 Plan. In the unlikely event that the process in Section 5.7.1 results in a project of this type being categorised in 'Phase 2', it will be returned to 'Phase 1'.

5.7.2 Projects which meet the Gate 2 Readiness Criteria via the DCO route will be categorised as 'Planning Obtained' when reordering the queue based on planning status.

5.7.3 Users will not receive their updated offer until the conclusion of their project's assessment under Gate 2 to Whole Queue. Existing agreements for projects which have met the Gate 2 criteria will remain in effect until a Gate 2 Modification Offer is provided and is signed.

5.7.4 When aligning to the 2030 pathway(s) and determining the projects in Phase 1; projects will count towards phase 1 **where some or all of their capacity is aligned** to the pathway. For example, if there is 50MW capacity 'remaining' in Phase 1 and the next project is 100MW, then this project will be included in Phase 1 and aligned to the 2030 pathway(s).

5.7.5 When aligning to the 2035 pathway and determining the projects in Phase 2; projects will count towards phase 2 **only where all of their capacity is aligned** to the pathway. For example, if there is 50MW capacity 'remaining' in Phase 2 and the next project is 100MW, then this project will not automatically be included in Phase 2.

5.7.6 In the example in 5.7.5, NESO would, where appropriate, engage with the 100MW project and invite the User to reduce the capacity to facilitate inclusion in the 2035 pathway.

5.8 Designated Projects in the revised queue

5.8.1 Designated Projects may be prioritised and brought forward in the reordered queue to enable more timely connections.

5.8.2 Designated Projects already in Phase 1 will maintain their existing relative queue position.

5.8.3 There may be cases where Designated Projects that have an existing connection date later than 2030 and have requested advancement to 2030 or earlier, do not qualify for Phase 1 based on their existing queue position or planning status. If this is the case, they will be added to the end of the Phase 1 queue.

5.8.4 Designated Projects that cannot advance to 2030 or earlier will be eligible for prioritisation to the front of the Phase 2 queue.

5.8.5 Projects designated under the 'Very long lead times' category will be seeking connection dates beyond 2035. Where these are identified, they will be added to the end of the Phase 2 queue.

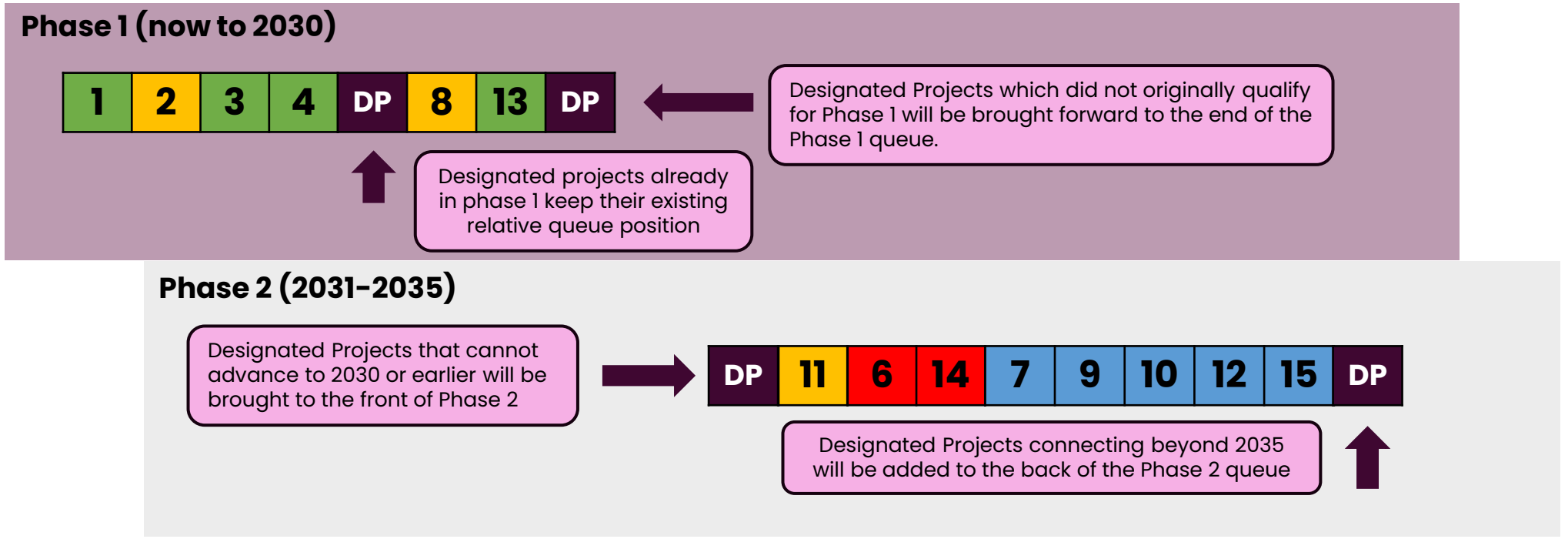

Figure 9: Designated Projects in the revised queue

5.9 Relevant embedded generation in the revised queue

5.9.1 NESO expects the CP30 Plan to distinguish between Transmission and Distribution requirements for each technology. On this premise, the exercise in Section 5.7.1 will be conducted by each DNO for their zone, using sub-queues of embedded projects only. DNOs will then inform NESO of the outcome.

5.9.2 Users who have an agreement with Transmission Connected Independent Distribution Network Operators will contribute towards the Transmission component of the pathways in the CP30 Plan.

5.10 Transmission connected demand projects in the revised queue

5.10.1 It is expected that some types of demand e.g. Electrolysers, will be in scope of the CP30 Plan and will therefore be aligned to the CP30 pathways as shown in the exercise in Section 5.7.1.

5.10.2 All other transmission connected demand that has met the Gate 2 Readiness Criteria will be assessed and provided with a connection offer. These projects will be 'sorted' into Phase 1 or Phase 2 depending on their contracted connection date or requested advancement date and will retain their original relative queue positions within each phase.

5.11 Hybrid projects in the revised queue

5.11.1 Hybrid projects will be managed according to how they interact with the system. If a hybrid project comprising of storage and an additional generating technology intends only to export to the transmission system (i.e. import capacity is behind the meter), it will only be considered as contributing towards the pathway for the additional technology. If a hybrid project comprising of storage and an additional technology intends to both import and export to the transmission system, it will be considered as contributing to the pathways for both storage and the additional technology.

5.11.2 Where a hybrid project comprises of multiple generating technologies and no import, the capacity counted as contributing towards the pathways will be the lower of the export capacity or installed capacity of each technology.

5.11.3 Where the capacity of one or more technologies exceeds the 2035 pathway, that technology element of the hybrid project will not receive a Gate 2 offer. This represents the same treatment as any other project that exceeds the 2035 pathway.

5.12 Transitional projects in the revised queue

5.12.1 Users which have made **new applications** on or after 2nd September and have signed a transitional agreement will have their projects assessed against the Gate 2 Readiness and Strategic Alignment Criteria as part of the Gate 2 to Whole Queue exercise. Those which have met the Gate 2 Readiness Criteria will be added behind all other projects in the pre-TMO4+ queue as shown in Section 5.3 before being assessed against the Gate 2 Strategic Alignment Criteria. Within this group they will be ordered based on the date NESO countersigned their agreement.

5.12.2 Users that have signed a **transitional agreement for a Modification Application** will also have their projects assessed against the Gate 2 Readiness and Strategic Alignment Criteria as part of the Gate 2 to Whole Queue exercise. These projects may be subject to a revised queue position based on the date NESO countersigned the agreement, if the change could potentially result in a system impact. Users that have requested a change in technology as part of their Modification Application are in most cases likely to be moved to this revised queue position before being assessed against the Gate 2 Readiness and Strategic Alignment Criteria.

5.13 Holding agreements in the revised queue

5.13.1 Where projects with 'holding agreements' from pre-TMO4+ meet the Gate 2 Criteria, a different approach will be taken depending on whether the 'holding agreement' has or has not previously been through a network design exercise.

5.13.2 In the event that a holding agreement has previously been through a network design exercise, the connection location and connection date determined as an outcome of that exercise will be considered within the Existing Application Gated Design Process rather than the connection location and connection date within the 'holding agreement'. The existing relative queue position of these projects will be used when determining alignment to the CP30 pathways.

5.13.3 In the event that a holding agreement has not previously been through a network design exercise, a revised queue position will be allocated in accordance with the onshore and offshore reservations as shown in Section 5.21 and the network design process will be undertaken as a result to provide a Gate 2 Offer for such projects.

5.13.4 In the event that NESO elects to Reserve (through Connection Point and Capacity Reservation) in relation to a Holding Agreement which has not yet met the Gate 2 Readiness criteria, this will also be treated in accordance with the onshore and offshore reservations as shown in Section 5.21.

5.14 Publishing the queue revision outcome

5.14.1 Once both the Gate 2 Readiness and Strategic Alignment Criteria have been applied to the existing queue, NESO will publish the outcome of this activity. This will inform existing and prospective Users whether pathway(s) have or have not yet been met in each zone, and where capacity may still be available for each technology type.

5.15 Managing cases of undersupply against Clean Power pathways

5.15.1 If, after aligning the queue to CP30 pathway(s), there is a shortfall of capacity in the revised queue against a **2030** technology pathway, this will be managed either through **zonal substitutions** or **reservation of capacity**.

5.15.2 If, after aligning the queue to CP30 pathway(s), there is a shortfall of capacity in the revised queue against a **2035** technology pathway, this will only be managed through **zonal substitutions**. 5.17.6 explains why reservation of capacity is not required for the 2031-2035 period prior to SSEP.

5.15.3 Where it is clear that undersupply is a result of a more systemic issue such as supply chain delays, NESO will advise Government and seek appropriate policy intervention.

5.16 Zonal substitutions to address undersupply

5.16.1 Where undersupply is a result of a zonal imbalance against a CP30 pathway, NESO (or the relevant DNOs) will determine whether adjusting the capacity allocated to adjacent zones will resolve the issue.

5.16.2 For example, if there is an undersupply of 500 MW of a technology in zone A, and oversupply of 500 MW of **the same technology** in zone B, NESO (or the relevant DNOs) will assess whether the project(s) in zone B are able to remain in the queue and count towards zone A's requirement.

5.16.3 This will only be permitted where **all** the following criteria are met:

a) The undersupply in zone A and the oversupply in zone B relate to the same technology
b) Zone A and zone B are geographically adjacent zones
c) Zone A and zone B are both Transmission zones, or are both Distribution zones
d) The project(s) in Zone B do not have a significantly worse impact on local constraints than a project connecting in Zone A

5.17 Reserving capacity to address undersupply

5.17.1 If undersupply against the 2030 pathway(s) cannot be resolved by zonal substitutions, then capacity and connection points will be reserved to support timely connections of this technology type in future. For example, if there is 1.5 GW of onshore wind in a zonal queue, the 2030 pathway for onshore wind in that zone is 2 GW, and no substitutions were possible, 500 MW would be reserved.

5.17.2 Not reserving connection points and capacity would mean that this capacity would instead be allocated to projects of other technology types which are required to meet a later pathway. Using the previous example, if the 500 MW were not reserved for onshore wind, then the next projects in the queue would be offered the capacity. If the 2030 solar requirement had already been met in that zone, the next projects in the queue might be projects contributing towards the 2035 solar requirement. This could result in the 2035 solar projects being connected earlier than they are needed, meanwhile future onshore wind projects needed for 2030 could be delayed as they would be at the end of a longer connections queue when they ultimately join it.

5.17.3 Reservations will take the form of 'placeholder projects' in the connection queue, with a substation bay allocated to them where possible. Zones with undersupply against the 2030 pathway(s) will be publicised during the Gate 2 to Whole Queue exercise along with details of any reservations made in relation to the undersupply.

5.17.4 Reservation for undersupply will not be allocated to a particular project. Any project that addresses the technology undersupply in that zone and meets the Gate 2 Readiness Criteria will be able to apply to Gate 2 and seek to make use of this reservation. These reservations will not be held exclusively for projects that match the specification of the placeholder exactly.

5.17.5 The point of connection and project specifications attributed to these 'placeholder projects' will be based on the availability of bays and substation capacity within the zone. Substations with a history of connections of that technology type (indicating project viability) will be prioritised, as will those where a connection of this technology would help to alleviate rather than exacerbate constraints. When studying these reservations, TOs may also study a range of locations or more onerous conditions to ensure projects that don't exactly match the placeholder can still be accommodated.

5.17.6 Reservations will not be made for undersupply against 2035 pathway(s). As applications for 2036+ connections will not be accepted until SSEP is published (except for certain Designated Projects), the queue will not extend beyond projects aligned to the 2035 pathway. As such, any projects addressing 2035 undersupply can join the end of the queue when applying to a future Gate 2 window.

5.18 Approach to TO studies and identification of reinforcement works

5.18.1 Once the queue has been formed, NESO and TOs can prepare for reassessment of these projects. NESO first creates Construction Planning Assumptions (CPAs) and confirms which projects should be assessed against which set of CPAs. This determines the scenarios and associated generation background against which the projects in question will be studied. These CPAs are then provided to TOs to use in their connection studies.

5.18.2 Through studying the network under several scenarios (e.g. winter case, summer outage case, high import, high export etc.), the relevant TO will determine the limitations of the network with the proposed connection in place. The types of assessments undertaken within connection offer timescales will include thermal, fault level, infeed loss, and pre/post fault assessments. The relevant TO may identify specific cases where additional studies are conducted within these timescales (e.g. NPS, rotor angle or voltage stability) however these will normally be conducted at a later date, prior to connection.

5.18.3 TOs will then propose any additional reinforcements required to facilitate the connection.

5.18.4 Of the reinforcements identified, how these are categorised as enabling and wider works will be covered in the **Connect and Manage Guidance.**

5.18.5 Categorisation of attributable and wider works for charging purposes is covered in **CUSC Section 14**.

5.18.6 Where a User has expressed a preferred alternative Point of Connection alongside their submission of Gate 2 Readiness evidence, NESO and the TOs will endeavour to consider this preference as part of the reassessment process.

5.18.7 Through this reassessment process, it is likely that projects will encounter consequential changes to their existing User Commitment or Final Sums liabilities and securities. Any such changes will be set out within the Gate 2 Modification Offers, and liabilities and securities will continue to be calculated under existing arrangements within the CUSC e.g. as per **CUSC Section 15** in respect of User Commitment.

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5.19 Reassessment of relevant embedded generation (1/2)

5.19.1 Where appropriate, assessments will also be undertaken at Grid Supply Points (GSPs) to determine any further local or GSP works required to connect relevant embedded projects. These assessments will enable TOs to identify requirements for e.g. new Super Grid Transformers (SGTs) or any requirements to resize those previously proposed.

5.19.2 The relevant TO will prioritise the following scenarios when determining which GSPs require reassessment as part of the Gate 2 to Whole Queue exercise:

a) Where a high percentage of projects previously contracted to connect at the GSP have been removed from the queue following the application of the Gate 2 Criteria
b) Where several Project Progressions are associated with a single GSP
c) Where works associated with new SGT(s) have been triggered

5.19.3 Technical Limits will continue to be used to facilitate the connection of relevant embedded generation before transmission reinforcement works have been completed.

5.19.4 In areas where Technical Limits are not currently in place, other design variations will be explored to facilitate earlier connections under temporary restrictions to availability.

5.19 Reassessment of relevant embedded generation (2/2)

5.19.6 If a Phase 1 project cannot be connected in 2030 or earlier under a firm (or enduring non-firm) connection, it will be assessed against the Technical Limits for 2030 and connected earlier under temporary restrictions to availability where possible.

5.19.7 Where Phase 2 projects have requested to connect before 2030, these projects will be assessed against the Technical Limits for 2030 and connected earlier under temporary restrictions to availability where possible. These projects will remain aligned to the 2035 pathway for the purposes of queue position and the date of their full connection, whether that be a firm connection or under enduring restrictions on availability. Their earlier connection date under temporary restrictions will not result in them being counted towards the 2030 pathway(s).

5.19.8 Projects which do not align with the 2030 or 2035 pathways will not be permitted to connect under Technical Limits. This will apply until the SSEP outlines a pathway beyond 2035. At this point, projects that align to the 2035+ pathway will be considered against 2035 Technical Limits where appropriate.

5.19.9 Projects eligible to connect under Technical Limits (or an equivalent Design Variation) are shown in Figure 10.

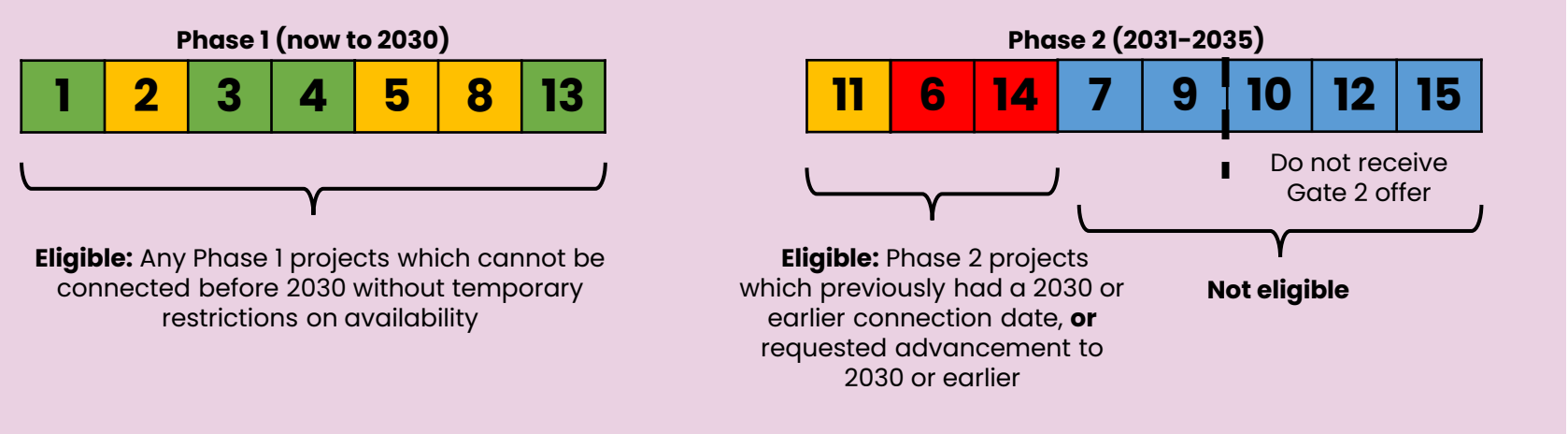

Figure 10: Projects eligible to connect under Technical Limits

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5.20 Study approach for 2030 pathway projects (1/2)

5.20.1 The Phase 1 sub-queues will initially be formed as shown in Section 5.7, with any necessary adjustments made for Designated Projects in line with Section 5.8. These sub-queues will then be recombined into the GB-wide queue. From here, NESO and TOs can apportion the queue into regions appropriate for studies. These may be the same as the CP30 zones (and include embedded projects that are within that zone), however in some cases may differ depending on size, or local constraints.

5.20.2 Projects will be reassessed against the transmission reinforcement works that are already planned to 2030. These studies will identify any changes required to the delivery timescales of these works, as well as identifying any new requirements for local works.

5.20.3 TOs will use a combination of queue-based and year-based studies to first determine which works are required, and then determine which projects trigger or are dependent on these works. It is changes to these works and their delivery dates which can facilitate advancement for projects which have requested it.

5.20.4 Queue-based studies involve assessing a project against all the other projects ahead of it in the queue. Year-based studies focus only on the projects that will be connected before or within the year being studied. The former is required to determine which works the individual project triggers. The latter can be used to identify cases for further advancement where appropriate.

5.20.5 In the event that it is not possible to advance a project, for example, where the sole use works are on the critical path and these cannot be brought forward, this will be determined before studies commence.

5.20.6 The potential removal of enabling works will still be considered for projects that do not request advancement. See 5.18.3 for an example of how this will be conducted.

5.20.7 There may be cases where not all projects need to be reassessed individually. Smaller projects may be combined and assessed collectively, where it is likely that the group of projects will all receive the same or a similar outcome from the assessment.

5.20.8 TO discretion will be applied to determine when it is suitable to group projects for assessment. In cases where a group of projects are found to trigger a reinforcement, further studies can be conducted as required to determine which projects in that group trigger the reinforcement.

5.20.9 TOs may also wish to conduct an 'end of queue study' to compare the prospective 2030 network requirements to the existing network plan to 2030, in zones where the queue has changed significantly following the application of the Gate 2 Criteria. See Section 5.21 for an explanation of this concept.

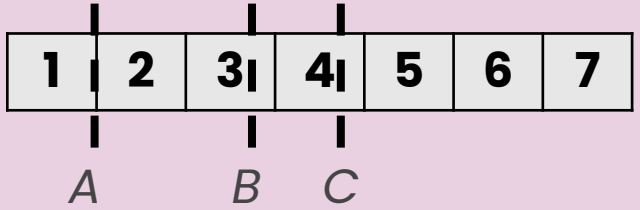
5.20 Study approach for 2030 pathway projects (2/2)

5.20.10 By preserving the **relative** queue position of projects that remain in the connections queue and align to the 2030 pathway(s), NESO and TOs minimise the risk of projects that do not request advancement being negatively impacted by the reassessment of other projects.

5.20.11 Although it is possible that projects will receive a later connection date following this reassessment, it is not anticipated to be a common outcome when reassessing projects that align to the 2030 pathway(s).

5.20.12 Figure 11 shows how projects will be reassessed against the existing programme of works. This is a simplified and illustrative example which assumes a project's queue position aligns with their order of connection.

Pre-TMO4+

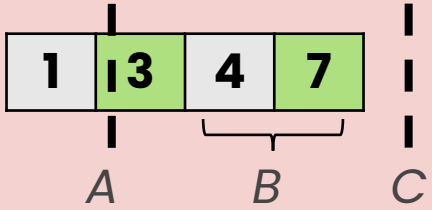


- Project 1 originally required reinforcement A
- Project 3 originally required reinforcements A and B
- Project 4 originally required reinforcements A, B and C.

Application of Gate 2 criteria

Projects 2, 5, and 6 did not meet the Gate 2 criteria, and so are removed from the queue.

Reassessment of remaining projects:



- Projects 3 and 7 have requested advancement.
- Projects 1 and 3 are studied individually; 4 and 7 are studied as a group.
- Project 1 no longer requires any reinforcements
- Project 3 requires reinforcement A (and no longer requires B)
- Project 7 requires reinforcements A and B (and no longer requires C)

Based on these results, it can be deduced that project 4 also no longer requires reinforcement C.

Further studies would be required to determine if project 4 also triggered reinforcement B.

Figure 11: Example of how 2030 pathway projects will be reassessed

5.21 Study approach for 2035 pathway projects (1/2)

5.21.1 The Phase 2 sub-queues will initially be formed as shown in Section 5.7, with any necessary adjustments made for Designated Projects in line with Section 5.8. These sub-queues will then be recombined into the GB-wide queue. From here, NESO and TOs can apportion the queue into regions appropriate for studies. These may be the same as the CP30 zones (and include embedded projects that are within that zone), however in some cases may differ depending on size, or local constraints.

5.21.2 Phase 2 may also include some Gate 1 projects that are selected for connection point and capacity reservation. Those that are selected and align to the 2035 pathway in the CP30 Plan will be added to the end of the queue after the Phase 2 projects which have met the Gate 2 readiness criteria.

5.21.3 Those selected for connection point and capacity reservation will be ordered such that onshore projects are placed ahead of offshore projects. This ordering only applies to reservations and not to onshore and offshore projects more broadly.

5.21.4 The ordering described in 5.21.3 is due to the additional assessment required for some offshore projects to determine their onshore landing point. This optionality is more effectively managed by grouping these projects together at the end of the queue. See Section 5.21.6 for further explanation.

5.21.5 Pre-TMO4+ relative queue position will be used to determine the order of onshore and offshore Gate 1 reservations in comparison to each other.

5.21.6 Figure 12 shows how projects eligible for connection point and capacity reservation at Gate 1 will be added to a regional study queue.

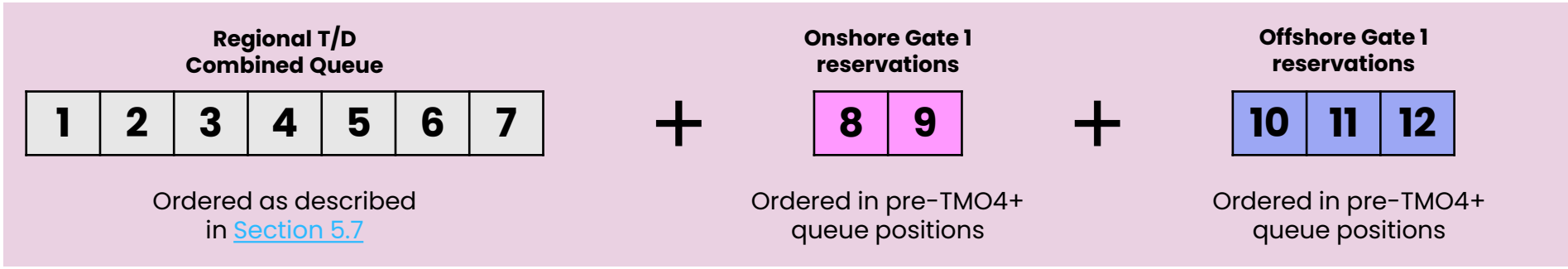


Figure 12: Example of how Gate 1 connection point and capacity reservations will be added to a zonal queue.

5.21 Study approach for 2035 pathway projects (2/2)

5.21.6 Ordering the regional study queue as shown in Figure 12 facilitates the collective assessment of Gate 1 offshore projects requiring connection point and capacity reservation. Grouping these projects enables a more coordinated onshore connection to be developed and several onshore connection points to be considered without impacting the rest of the queue.

5.21.7 This assessment will resemble that of the previous Connection and Infrastructure Options Note (CION) process, whereby several connection options are assessed from an economic and environmental perspective in addition to assessing their impact on the overall transmission system. Offshore projects which are within scope of The Crown Estate and/or Crown Estate Scotland leasing rounds will be assessed via a separate process.

5.21.8 Figure 13 shows how the reassessment of projects in Phase 2 will be approached on a regional basis and introduces the concept of an 'end of queue study'.

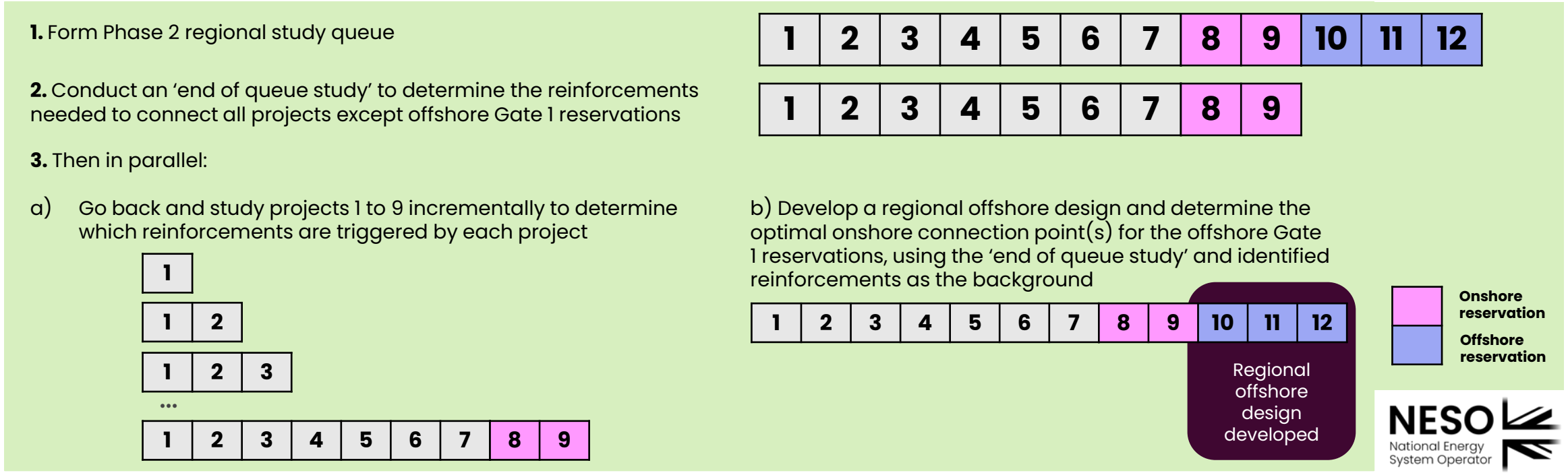


Figure 13: Example of how the Phase 2 queue will be assessed for each zone

5.22 Advancement Requests

5.22.1 As part of the Gate 2 to Whole Queue exercise, capacity will be "freed up" by projects that have not met the Gate 2 Criteria being removed from the queue.

5.22.2 Alongside submitting evidence that they have met the Gate 2 Readiness Criteria, Users can also request that their project is considered for advancement as part of the Gate 2 to Whole Queue exercise. A template form for requesting advancement is included in the **Gate 2 Criteria Methodology**.

5.22.3 By reassessing the project against the updated background of fewer connection projects, it may be possible to offer an improved connection date. Requesting advancement does not guarantee that the connection date of a project will be advanced. In areas of the network where most projects have met the Gate 2 Criteria, there may be limited potential for advancement.

5.22.4 There is an expectation that Users will conduct the necessary due diligence before confirming their earliest advancement year and be confident that they will be able to commit to this when updated offers are issued. The implications of not accepting an advancement are explained further in Section 5.25.

5.22.5 For relevant embedded generation projects, the User will need to provide this information to the DNO. The DNO will then include this in their submission to NESO when confirming which projects have met the Gate 2 Criteria.

5.22.6 As part of their advancement request, Users will be able to advise whether they still wish to be considered for advancement if it results in a change to their existing Point of Connection (PoC). For example, a User may have originally applied to connect at a substation that was at full capacity, and so the User may have been offered a connection at an alternative substation. Once the Gate 2 Criteria has been applied to the queue, bays may become available at the originally requested substation, and changing the point of connection to that substation may facilitate advancement.

5.22.7 NESO and TOs will endeavour to accommodate a project's PoC request, but there may be cases where this is no longer available or optimal and a different POC needs to be assessed.

5.22.8 Projects which align to the 2035 pathway rather than 2030 pathway(s) will still be considered for advancement. However, this will only be considered within the 2031-2035 range even if advancement to 2030 or earlier was requested.

5.23 Considering existing agreement terms in advancement requests

5.23.1 Where a User has an existing connection agreement, their project will be assessed for advancement in line with the terms of their existing agreement. For example, a User with a firm connection will be assessed to determine if their firm connection date can be advanced. Similarly, User with enduring restrictions on availability will have their projects assessed for an earlier connection with the same enduring restrictions, where it is clear those would still apply.

5.23.2 Where a User requesting advancement has an existing connection agreement with temporary restrictions on availability, and these restrictions are no longer required against the revised queue and network background, reassessment without these restrictions applied may result in advancement to the User's connection date.

5.23.3 If the advancement request cannot be met by the assessments conducted in 5.23.1 and 5.23.2, the potential for further advancement under new restrictions on availability will be evaluated on a case by case basis.

5.23.4 The further advancement described in 5.23.3 will only be considered in cases where the wider Main Interconnected Transmission System (MITS) reinforcement work is on the critical path of the connection, and TO discretion will be applied to determine if this should be pursued. The User can indicate that they would like to be considered for this type of further advancement in their advancement request.

5.24 Gate 2 Offers

5.24.1 As the Gate 2 to Whole Queue assessment process will assess 2030 and then 2035 pathway projects, it is possible that some Gate 2 offers may be issued earlier than others. NESO intend to issue offers in batches as and when these are ready.

5.24.2 As demonstrated in Section 5.20, Users who did not request advancement may find their updated Gate 2 offer terms change as a result of the reassessment exercise. For those aligning to the 2030 pathway(s) these changes are primarily expected to relate to Transmission Reinforcement Works and associated Securities and Liabilities.

5.24.3 In certain circumstances, e.g. where projects with original connection dates of 2031 or earlier align to the 2035 pathway rather than the 2030 pathway(s), these Users may receive updated offers with a later connection date compared to their original date.

5.24.4 In limited circumstances, this may also result in a change to the Point of Connection. For example, a bay that was originally assigned to a project that has now been aligned to the 2035 pathway may be reallocated to a project that aligns to the 2030 pathway(s)

5.24.5 NESO and TOs will endeavour to limit cases such as 5.24.4 where a preference to change Point of Connection has not been expressed by the User. However, the relevant TO will be able to apply greater discretion in amending Points of Connection where the network owner has agreed to build the connection out to the User. In cases where the User is responsible for building the connection to the connection site, the relevant TO will consider the impact on the User of changing the Point of Connection.

5.25 Offer terms when a project has been advanced

5.25.1 Where a User requested advancement and this is consequently validated by TOs through network studies, the User will receive a Gate 2 offer with an advanced connection date, updated transmission works, securities and liabilities. Users may also be offered a different point of connection, for example in cases where a substation was previously at full capacity, but now has available bays.

5.25.2 Users will then have the option to either accept the offer, allow it to lapse, or request a reoffer for their original connection date during the offer acceptance period. The latter option will not be permitted in the cases outlined in 5.25.4 and 5.25.5.

5.25.3 If requesting a reoffer for their original connection date, the User will need to agree to all other new terms of their offer, including point of connection, securities and liabilities, and transmission reinforcement works. As the project has not been assessed against the reinforcement works outlined in the original agreement (where these have changed), it will not be possible to revert to these and the securities associated with them. Similarly, the original point of connection may no longer be available and may have been reallocated to another project, therefore the newly offered connection point must also be retained.

5.25.4 The option to request a reoffer will not be available in cases where a User previously had a connection date of 2031 or later, but has requested advancement to pre-2030 and as a result their project capacity is deemed to align to the 2030 pathway(s). This is to discourage advancement requests being made solely to enable consideration against the 2030 pathway(s).

5.25.5 Similarly, if the User's original connection date is later than 2035, reverting to that date will not be permitted (unless the project is Designated under the 'Very long lead time' category).

5.25.6 In cases 5.25.4 and 5.25.5, where a User does not wish to accept their Gate 2 offer, it will remain open for acceptance with the advanced date until it lapses.

5.25.7 Where an offer lapses, the User can request to have this reissued as a Gate 1 Offer via a Gate 1 ATV. This option is only available for directly connected users. Relevant embedded Users will retain their existing agreement with the DNO.

5.25 Advancement offer terms (continued)

5.25.8 If advancement is not possible and the connection date offered is later than the original connection date, there will not be an option to revert to the original connection date.

5.25.9 The earliest advancement that will be offered will be the earliest date requested by the User. Where network studies indicate that further advancement could be facilitated, this will not be offered.

5.25.10 Once offered an advancement, a User will not be able to negotiate an advancement less than that which has been offered. For example, if a project had an original connection date of 2032, and the User requested advancement to 2028 and was offered this, they would not then be able to request a lesser advancement to a date between 2029 and 2031.

5.25.11 Under the current Queue Management Guidance, NESO will either terminate or have the right to terminate where Users miss Queue Management Milestones. Where NESO has a right to terminate, there will be an internal NESO escalation process before this right is exercised. If a User were to accept an advancement offer and then miss a queue management milestone soon after, this would be taken into account as part of the internal NESO escalation process.

Public

06. Gate 1 Assessment

This section provides an overview of the assessment and offer process for Gate 1 applications, and the connection point and capacity reservation process for eligible projects at Gate 1.

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6.1 Gate 1 Assessment

6.1.1 The figure below shows the Gate 1 Assessment in the context of the overall CND process.

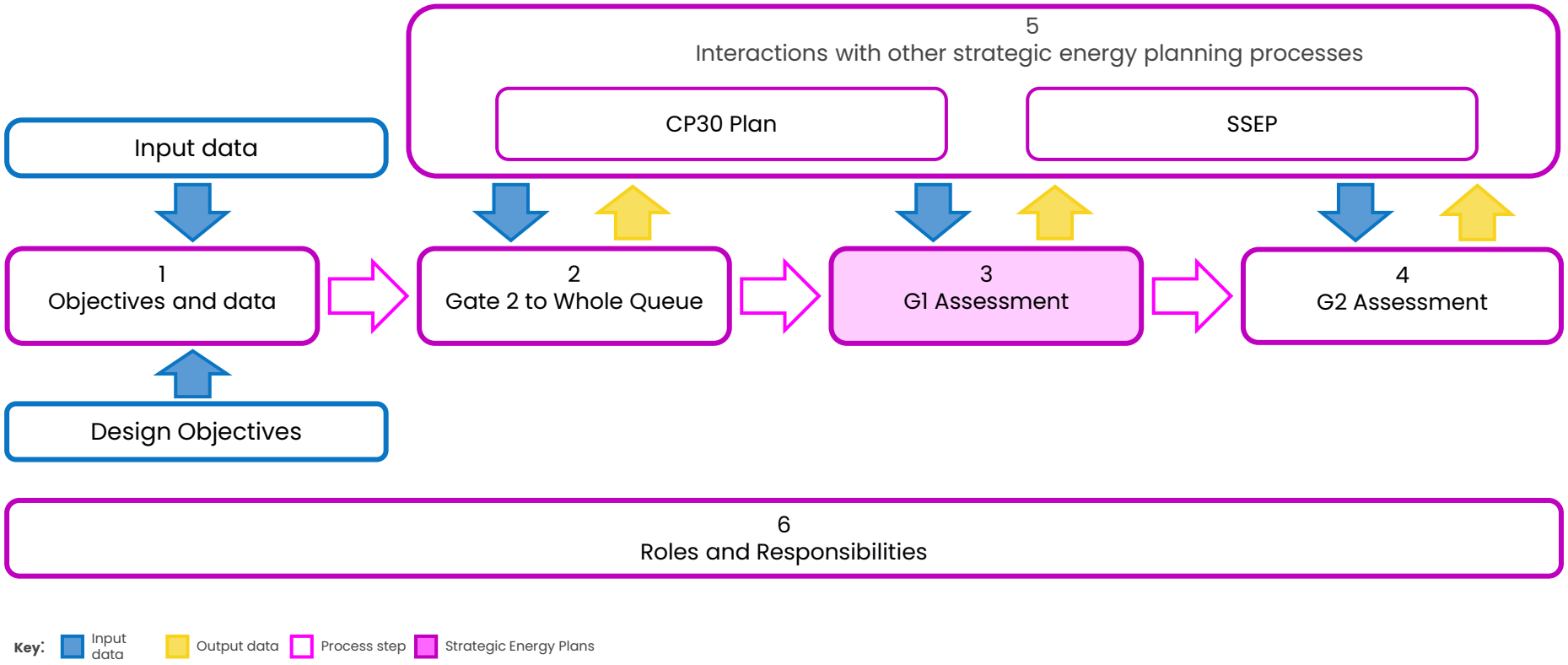

Figure 14: Gate 1 Assessment in the CND process

6.2 Purpose of a Gate 1 application

6.2.1 Applying to Gate 1 is optional, and provides two benefits:

1) It provides the User with an indication of the connection dates being offered for similar projects in the area they have applied to connect
2) It facilitates the reservation of connection points and capacity for eligible projects (see Section 6.3)
3) Informs certain types of anticipatory investment

6.2.2 Gate 1 is not applicable for relevant small and medium embedded projects.

6.3 Indicative Connection Date and Connection Location at Gate 1

6.3.1 Projects that apply to Gate 1 and are not progressed with connection point and capacity reservation will receive an offer with an indicative date and indicative connection location. For these projects, the indicative date and indicative connection location will be determined through a desktop exercise and will be based on recent Gate 2 offers made to projects of a similar technology and capacity, connecting in the same or nearby location.

6.3.2 NESO will conduct this desktop exercise and will share preliminary results with the relevant TO for review.

6.3.3 A Gate 1 Offer is designed to give a realistic indication of the offer that could be made if a User were to apply in the next Gate 2 application window. Any variance between the indicative offer received at Gate 1 and the full offer received at Gate 2 will primarily be due to the volume of other projects that apply (and meet the Gate 2 criteria) ahead of the project in question, as well as any further network reinforcements that may be triggered by these projects.

6.3.4 Where a CP30 pathway for a particular technology has been met, the indicative date for a Gate 1 project would be set to a date later than the date of the pathway. For example, if there were sufficient storage capacity in the queue in a particular zone to meet the 2035 pathway, then any storage projects exceeding that pathway would be given an indicative date of 2036 or later. If there were cases where the 2035 pathway was expected to be achieved later than 2036, the indicative date would be later than 2036.

6.3.5 A Gate 1 offer will not determine or influence the queue position, connection date or connection location that is allocated upon reaching Gate 2, except in cases where a connection point and capacity are reserved (see Section 6.3).

6.3 Connection Point and Capacity Reservation at Gate 1

6.3.1 NESO may reserve connection points and capacity for as yet unknown projects, as well as for specific Gate 1 projects that require it. Examples of the types of reservation NESO may make include those for:

a) undersupply against CP30 pathways
b) future Network Services Projects ahead of tendering
c) facilitating network competition
d) facilitating future leasing rounds initiated by The Crown Estate and Crown Estate Scotland
e) ad-hoc projects at Gate 1 which are unable to meet the Gate 2 Readiness Criteria until their onshore point of connection is confirmed

6.3.2 If a DNO identifies a relevant embedded project which would benefit from connection point and capacity reservation, they can notify NESO and submit relevant information on behalf of the project.

6.3.3 Where these projects require a full assessment akin to a project at Gate 2, these assessments will be conducted alongside Gate 2 assessments. See Section 7.4 for how these projects will form part of the Gate 2 Tranche queue (Section 5.21 for Gate 2 to Whole Queue).

6.3.4 For the purposes of network studies, where capacity is being reserved (and not solely a Point of Connection), Gate 1 reservations will be treated as though they have met Gate 2 and assigned a queue position.

6.3.5 Example (e) can be used to designate Interconnector and Offshore Hybrid Asset projects where required. Where these reservations are made for and contracted with a specific user (rather than being held by NESO until assigned to a User), there will be a bilaterally agreed minimum reservation period with an annual review thereafter, to ensure the reservation is not held indefinitely.

6.3.6 The type of Gate 1 reservation in 6.3.5 will provide the detail of the reserved connection point, capacity and connection date in the Gate 1 Offer; however, this will be conditional on the project meeting the Gate 2 Criteria and accepting a Gate 2 offer prior to the reservation expiry date.

6.4 Anticipatory Investment

6.4.1 NESO consider the following to be forms of anticipatory investment:

a) prioritising more economic and efficient solutions by undertaking a coordinated network design
b) progressing network build for certain Gate 1 reservations
c) forecasting future connections and progressing network build ahead of these

6.4.2 Prior to SSEP being published, the focus will be on type a) and b) to build the network that is needed to deliver the 2030 and 2035 pathways within the CP30 Plan. The end of queue study concept enables us to achieve a view of the network at a point in time (e.g. 2035) and begin building to that sooner. Pre-TMO4+ applications were assessed largely on a project-by-project basis and therefore more incremental reinforcements were identified to connect those individual projects. By looking out to the end of the queue, NESO and TOs can determine the 'end state' and work towards that in the most efficient way possible.

6.4.3 Projects designated under the 'Very long lead times' category connecting after will also be built for and included in network design where they meet the Gate 2 Readiness Criteria.

6.4.4 We expect to progress network build for Connection Point and Capacity Reservations that have an associated User. Reservations which are to address a need (e.g. Network Services procurement, undersupply) and there is not yet an associated User will be assessed on a case-by-case basis to determine if it is appropriate to progress network build. Where the network requirements are clear and there are few alternatives to meet the requirement, then this may be recommended to proceed ahead of the reservation being issued to a User.

6.4.5 We expect anticipatory investment of type 6.4.1 c) to be minimal prior to the first SSEP publication, as until then we will be focussing on maximising existing network capacity to 2030 and optimising the network plan to 2035. With the introduction of SSEP there will be a longer-term view of need, accompanied by the necessary spatial information to give NESO and TOs confidence that anticipatory investment will be utilised.

6.4.6 Once TMO4+ is more established, NESO believes there will be a stronger case for using Gate 1 projects that align to future strategic plans to inform anticipatory investment. For relevant embedded generation and demand, the ongoing GC139 grid code modification proposes to extend existing demand forecasts to cover generation and provide an equivalent data source for this group of projects.

Public

07. Gate 2 Assessment

This section provides an overview of the queue formation and assessment process for new Gate 2 applications that have met the Gate 2 Readiness Criteria. It also explains how capacity is reallocated following termination or offer rejection of Gate 2 projects.

This section applies for all Gated application windows following the initial and one-off Gate 2 to Whole Queue exercise.

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7.1 Gate 2 Assessment

7.1.1 The figure below shows the Gate 2 Assessment in the context of the overall CND process.

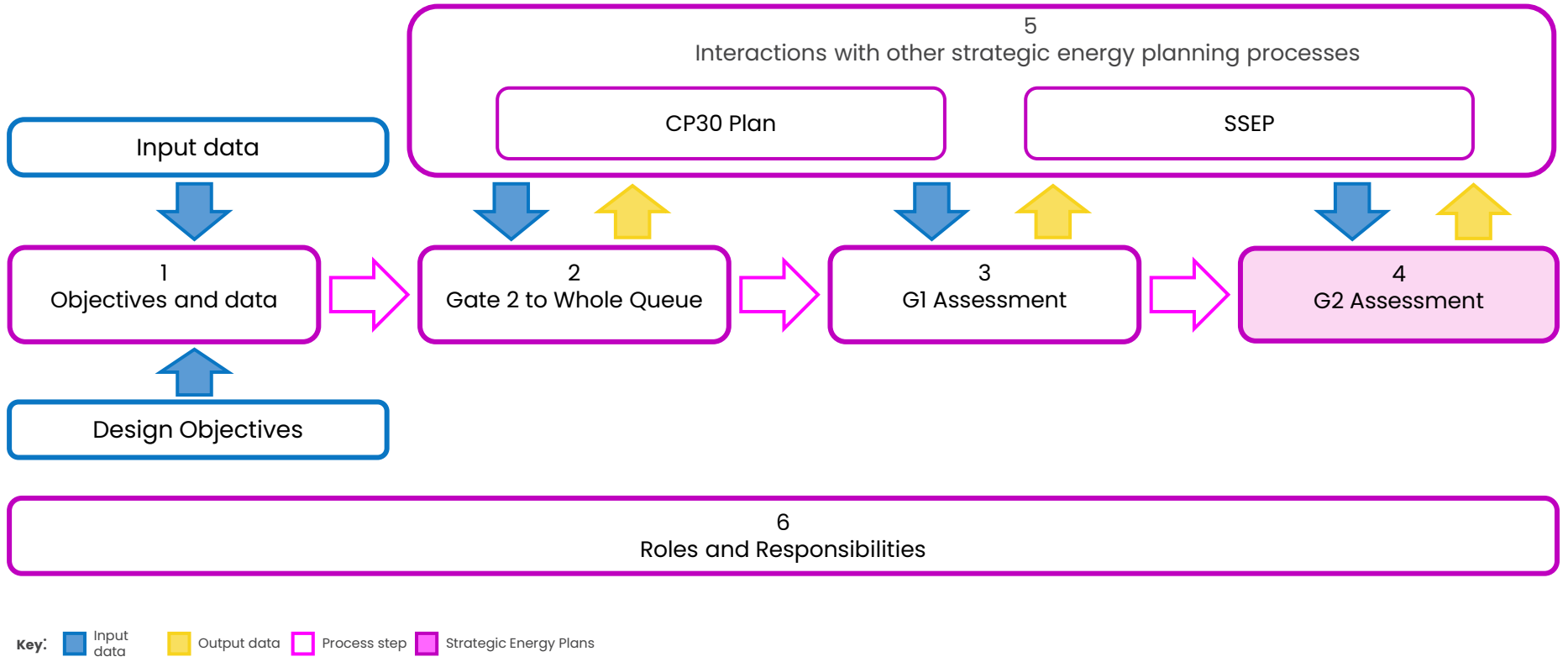

Figure 15: Gate 2 Assessment in the CNDM process

7.2 Assessing the Gate 2 Tranche against the Gate 2 Criteria

7.2.1 The batch of projects that applies in a particular Gate 2 application window will be referred to as the Gate 2 Tranche.

7.2.2 Once the Initial Gate 2 Readiness Criteria checks are complete, and the application is declared competent, the Gate 2 Tranche will be assessed against the Gate 2 Strategic Alignment Criteria.

7.2.3 As with Gate 2 to Whole Queue, alignment to the CP30 Plan will be conducted in two phases. The first phase will address undersupply against the 2030 pathway(s), and the second phase will address undersupply against the 2035 pathway.

7.2.4 The projects within the Gate 2 tranche will be added to the queue after those that formed part of the revised queue in the Gate 2 to Whole Queue exercise, except in the following circumstances:

a) Where projects address previously identified undersupply against the 2030 pathway(s) and can take advantage of a reservation for undersupply
b) Where projects are applying to Gate 2 to secure their Gate 1 Connection Point and Capacity Reservation
c) Where projects are selected for capacity reallocation following termination of another project

7.2.5 The date the Gate 2 Readiness Criteria was met will be used in aligning the Gate 2 Tranche to the CP30 pathways. Where two or more projects met this criteria on the same date, they will be separated based on the date and time their Gate 2 application was submitted. The User with the earliest Gate 2 application submission will be given priority in queue ordering.

7.2.6 This approach will apply to all Tranches from the first Gate 2 application window (i.e. new Gate 2 applications) and is expected to apply until the Strategic Spatial Energy Plan (SSEP) is published.

7.3 Aligning the Gate 2 Tranche to the CP30 pathways

7.3.1 The following process will be used to align the Gate 2 Tranche to the CP30 pathways and address any undersupply.

1. Form a sub-queue for each technology in each zone (e.g. Storage queue in Zone 1), ordered by date the Gate 2 Readiness Criteria was met.

2. Split queue into Phase 1 (addressing undersupply to 2030) and Phase 2 (addressing undersupply to 2035)

3. Bring any Designated Projects (DP) to the front of the relevant phase

4. Determine point in the Phase 1 queue where the upper end of the 2030 pathway is reached. Any above the pathway are moved to Phase 2, ordered by **date the Gate 2 Readiness Criteria were met**.

5. Determine point in the Phase 2 queue where the upper end of the 2035 pathway is reached. Any projects above the pathway will not receive a Gate 2 Offer.

6. Recombine the Phase 1 sub-queue with the Phase 1 GB-wide queue, ordered by date the Gate 2 Readiness Criteria was met.

7. Recombine the Phase 2 sub-queue with the GB-wide queue, ordered by date the Gate 2 Readiness Criteria was met.

8. Add the Phase 2 queue to the end of the Phase 1 queue.

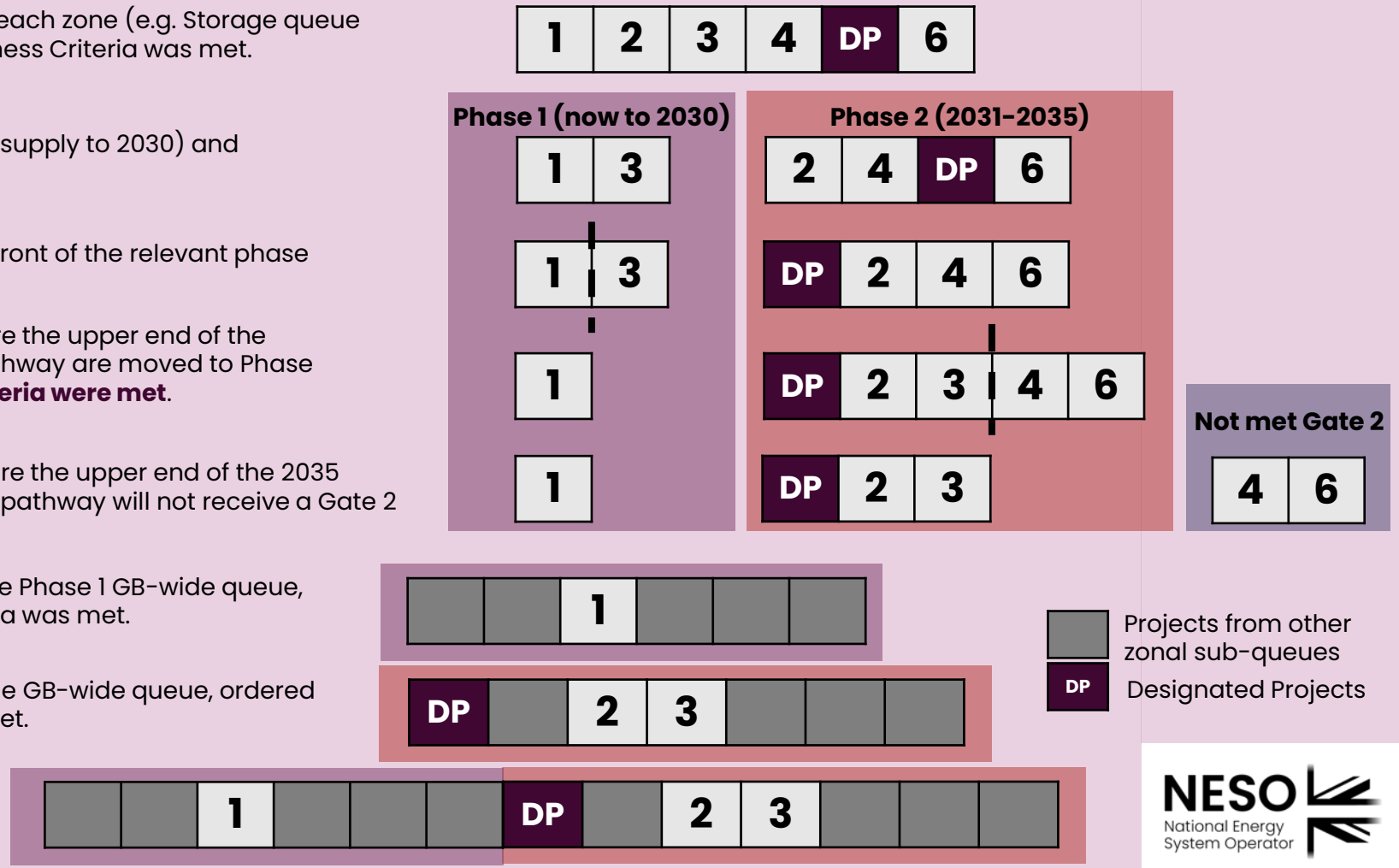

Figure 16: Aligning Gate 2 Tranche to the CP30 pathways

7.4 Managing new Gate 1 reservations within the Gate 2 Tranche

7.4.1 Once the queue order has been determined for the Gate 2 Tranche, any Gate 1 Connection Point and Capacity Reservations will be added to the Tranche as shown in Figure 17, grouped depending on whether the reservation is for an onshore or offshore project.

7.4.2 Within each of the onshore and offshore groupings, reservations associated with specific projects that have applied to Gate 1 will be added to the queue first, followed by reservations which NESO makes in anticipation of future tenders or leasing rounds (see Section 6.3 for examples of reservation types). The former will be ordered by the requested connection date, and the latter will be ordered as determined by NESO.

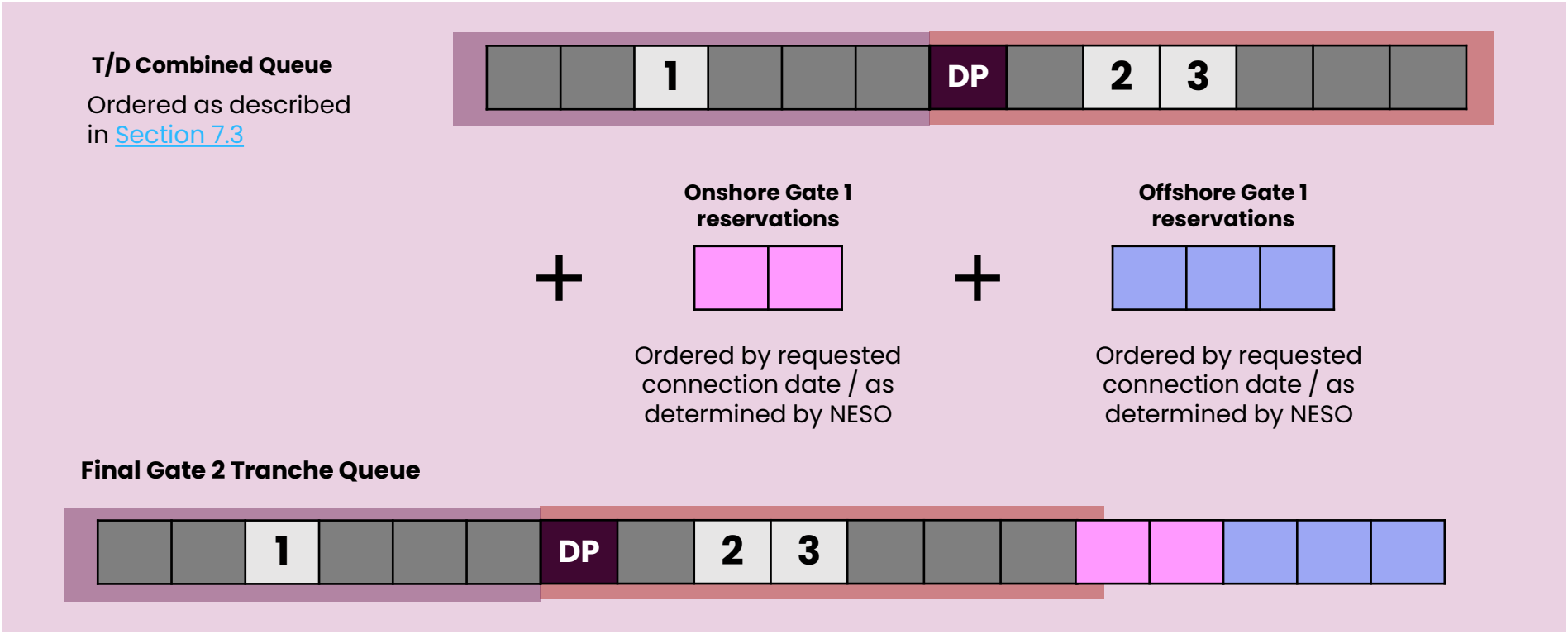

Figure 17: Determining queue position for Gate 1 reservations

7.5 Relevant embedded generation in the Gate 2 Tranche

7.5.1 NESO has recommended that the CP30 Plan distinguishes between Transmission and Distribution requirements (by capacity and location) for each technology. On this premise, the exercise in Section 7.3 will be conducted by each DNO for their zone, using sub-queues of embedded projects only. DNOs will then inform NESO of the outcome.

7.5.2 Users who have applied to a Transmission Connected Independent Distribution Network Operator will contribute towards the Transmission element of the pathways in the CP30 Plan.

7.6 Transmission connected demand projects in the Gate 2 Tranche

7.6.1 It is expected that some types of demand e.g. Electrolysers, will be in scope of the CP30 Plan and will therefore be aligned to the CP30 pathways as shown in the exercise in Section 7.3.

7.6.2 All other transmission connected demand that has met the Gate 2 Readiness Criteria will be assessed and provided with a Gate 2 offer. These projects will be 'sorted' into Phase 1 or Phase 2 depending on their requested connection date.

7.7 Hybrid projects in the Gate 2 Tranche

7.7.1 Hybrid projects will be managed according to how they interact with the system. If a hybrid project comprising of storage and an additional generating technology intends only to export to the transmission system (i.e. import capacity is behind the meter), it will only be considered as contributing towards the pathway for the additional technology. If a hybrid project comprising of storage and an additional technology intends to both import and export to the transmission system, it will be considered as contributing to the pathways for both storage and the additional technology.

7.7.2 Where a hybrid project comprises of multiple generating technologies and no import, the capacity counted as contributing towards the pathways will be the lower of the export capacity or installed capacity of each technology.

7.7.3 Where the capacity of one or more technologies exceeds the 2035 pathway, then that technology element of the hybrid project will not receive a Gate 2 offer. This represents the same treatment as any other project that exceeds the 2035 pathway.

7.8 Gated Modification Applications in the Gate 2 Tranche

7.8.1 Based on the Gated Modification Guidance, if the modification is Gated, it will need to be applied for at the next Gated Application window. If the modification is not Gated, it can be applied for under the pre-TMO4+ process and will subject to the associated timelines.

7.8.2 If the Gated Modification involves a technology change, whether that be addition or removal, its queue position may be subject to change as set out in the Material Technology Change Guidance.

7.8.3 This change in queue position could result in capacity becoming available, which can be reallocated as per the process outlined in Sections 7.15-7.18).

7.9 Utilising previous undersupply reservations

7.9.1 Where there is undersupply of a particular technology in a particular zone, and a connection point and capacity has previously been reserved in relation to this undersupply, then the project(s) added to Phase 1 to address that undersupply will take the queue position of the 'placeholder project' holding the reservation.

7.9.2 The project(s) addressing the undersupply will then be assessed accordingly from that queue position. The 'gap' left in Gate 2 Tranche Queue is then closed as shown in Figure 18.

7.9.3 As the placeholder project has already been assessed and associated works have been identified, the project addressing the undersupply will be compared to the placeholder project to determine if further studies are required. This may be the case where for example the project is connecting to a different site to where the reservation was made.

7.9.4 If further studies identify additional works are required, these will be attributed to the project addressing the undersupply. In the event that these additional works have a consequential impact on existing projects behind this project in the queue, the existing agreements of these projects will be protected.

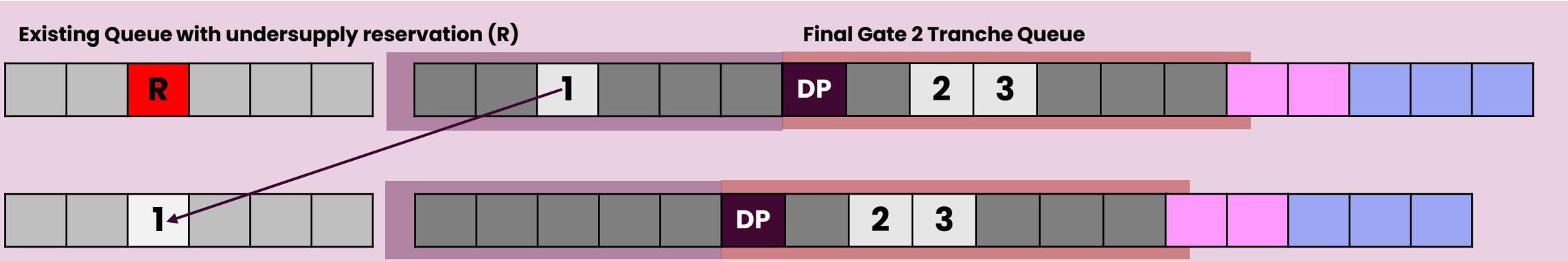

Figure 18: Determining queue position for undersupply reservations

7.10 Approach to studies and identification of reinforcement works (1/2)

7.10.1 Ordering the queue as shown in Section 7.4 facilitates the collective assessment of Gate 1 offshore projects requiring connection point and capacity reservation. Grouping these projects enables a more coordinated offshore connection to be developed and different onshore connection points to be considered without impacting the rest of the queue.

7.10.2 This assessment will resemble that of the previous Connection and Infrastructure Options Note (CION) process, whereby several connection options are assessed from an economic and environmental perspective in addition to assessing their impact on the overall transmission system. Offshore projects which are within scope of The Crown Estate and/or Crown Estate Scotland leasing rounds will be assessed via a separate process.

7.10.3 TOs may also wish to conduct an 'end of queue study' to compare the prospective 2035 network requirements to the existing network plan to 2035, particularly in zones where there are a significant number of projects in the Gate 2 Tranche. See Section 5.21 for an explanation of this concept.

7.10.4 Once the queue has been formed, NESO and the TOs can prepare for assessment of these projects. NESO first creates Construction Planning Assumptions (CPAs), and will confirm which projects should be assessed against which set of CPAs. This determines the scenarios and associated generation background against which the projects in question will be studied. These CPAs are then provided to TOs to use in their connection studies.

7.10.5 Through studying the network under several scenarios (e.g. winter case, summer outage case, high import, high export etc.), the relevant TO will determine the limitations of the network with the proposed connection in place. The types of assessments undertaken within connection offer timescales will include thermal, fault level, infeed loss, and pre/post fault assessments. The relevant TO may identify specific cases where additional studies are conducted within these timescales (e.g. NPS, rotor angle or voltage stability) however these will normally be conducted at a later date, prior to connection.

7.10 Approach to studies and identification of reinforcement works (2/2)

7.10.1 TO discretion will be applied to determine when it is suitable to group projects for assessment. In cases where a group of projects are found to trigger a reinforcement, further studies can be conducted as required to determine which projects in that group trigger the reinforcement.

7.10.2 TOs will then propose any additional reinforcements required to facilitate the connection.

7.10.3 Of the reinforcements identified, how these are categorised as enabling and wider works will be covered in the **Connect and Manage Guidance**, which will be updated prior to TMO4+ go-live.

7.10.4 Categorisation of attributable and wider works for charging purposes is covered in **CUSC Section 14**.

7.11 Design Variations and Interim Restrictions on Availability

7.11.1 Users may continue to request design variations as part of their Gate 2 application, which may be facilitated through interim and/or enduring restrictions on availability.

7.11.2 The User may provide detail within their application of the design variations they would like to be considered for their connection. NESO and the relevant TO will take this into account however may also consider alternative variations where appropriate.

7.11.3 NESO and TOs will determine which options are appropriate for the User and their connection and advise the User of their options as early as possible within the design process, prior to offer.

7.11.4 The Accelerated Storage initiative will be considered as an option in the above, where applicable.

7.11.5 There may be cases where a project's firm connection date, identified through studies, is not sufficient to align to the pathway it was intended to address undersupply for. For example, where a project addressing undersupply against the 2030 pathway(s) can only be offered a firm connection in 2031, the TO may undertake further assessments to determine if interim restrictions on availability will enable the project to connect within the pathway time horizon on a "non-firm" basis.

7.12 Derogations

7.12.1 In limited circumstances there may be a requirement for NESO and the relevant TO to request a derogation from SQSS in order to facilitate a connection.

7.12.2 In the case in 7.12.1, any affected User will be notified when this is initially identified within the Gate 2 assessment period and the implications of this will be discussed with the User prior to an offer being issued.

7.13 Competition and Contestability

7.13.1 Where early or late competition is identified by another process other than Network Services Procurement (such as CSNP), the Connection Point and Capacity reservation process would potentially be used to make any necessary reservations, such as bays, to facilitate the connection of the Competitively Appointed Transmission Owner (CATO) project.

7.13.2 Following the completion of each Gate 2 Tranche assessment, TOs will be required to identify and inform NESO of any works which are 'separable' and could be eligible for network competition.

7.13.3 Users may continue to request contestable assets for their connection under TMO4+ in accordance with the CUSC. This request can be made upon application to Gate 2, or application to Gate 1 where eligible for Connection Point and Capacity Reservation.

7.13.4 For the avoidance of doubt, contestable connections must still meet the Gate 2 Readiness and Gate 2 Strategic Alignment Criteria.

7.14 Connection Bays

7.14.1 As a result of the Gate 1 Connection Point and Capacity Reservation, bays may be reserved for particular projects, or for projects as yet to be identified.

7.14.2 Where appropriate, NESO and TOs will consider opportunities for users to share bays, particularly where this facilitates earlier and/or more efficient connections. Considerations will be made in line with **Bay Sharing Policy**.

7.15 Capacity Reallocation at Gate 2

7.15.1 There are several circumstances where a project with a Gate 2 agreement, or in the process of receiving a Gate 2, offer may exit the queue. These include self-termination, NESO termination (due to missed Queue Management milestones), and rejection of a Gate 2 offer. When a project exits the queue, capacity will be "freed up" and NESO will endeavour to reallocate this capacity or offer advancement to the next most suitable project that can make use of it.

7.15.2 The ideal method of reallocating capacity would be to reassess every project in the queue behind the exiting project, to determine if their connection offer can be improved. However, it is not efficient to conduct this every time a project exits the queue, and so a more practical approach must be taken. NESO will work with the relevant TO or DNO to review the projects that are behind the exiting project in the queue and identify which is the most suitable to reallocate the capacity to.

7.15.3 The intention of this approach is to minimise the impact on other projects in the queue when capacity is reallocated. No contractual changes will be made to any other projects as a result of capacity reallocation i.e. when Project A exits the queue, reallocating its capacity will not result in a negative impact on Project B, the next project in the queue.

7.15.5 Users with a project in the queue will be able to indicate their ability to advance their connection date. Users will be advised to update this declaration at regular intervals and it will be taken into account when determining how capacity should be reallocated. Suitable projects may also be approached by NESO to discuss the potential for advancement as a result of capacity reallocation.

7.15.6 In the initial application windows for TMO4+, capacity reallocation will primarily be used in cases where projects that align to the 2030 pathway(s) exit the queue. If projects that are required for 2035 pathway exit the queue, capacity will only be reallocated in limited circumstances. See Section 7.17 for how capacity reallocation for 2031-2035 projects will be managed.

7.15.7 The approaches outlined in Section 7.16 and Section 7.17 will apply to capacity reallocation conducted within each Gate 2 window that opens prior to the publication of SSEP.

7.16 Capacity reallocation for directly connected projects connecting in 2030 or earlier

7.16.1 The following approach applies to directly connected projects. See Section 7.18 for capacity reallocation for relevant embedded projects.

7.16.2 If a 2030 pathway(s) project exits the queue, capacity will be reallocated to a 2035 pathway project that is already in the queue where possible.

7.16.3 The capacity will normally be reallocated to the next project that best aligns with the following guidelines:

a) Is of the same technology as the exiting project
b) Is in the same CP30 zone as the exiting project
c) Is also directly connected to the Transmission network
d) Is of the same or less capacity as the exiting project
e) Can make use of the available capacity i.e. will not have a significantly different impact on constraints, or require new network reinforcement to connect

7.16.4 There are limited circumstances under which capacity may be reallocated to a project that does not align with all the guidelines in 7.16.3, namely:

a) Where another technology is more significantly undersupplied against its 2030 pathway(s) and there are 2035 pathway projects of this technology that can advance
b) Where a Designated Project has not been sufficiently advanced to address the need it was designated for
c) Where the project is of slightly greater capacity and still adheres to 7.16.3. item e)

7.16.5 This reallocation will mean the 2030 regional capacity for that technology is 'topped up' to maintain alignment with the 2030 pathway(s). This will leave a 'gap' in place of the 2035 project's original queue position. This capacity will in turn be allocated in line with Section 7.17. Where this cannot be achieved within the same application window, the 'gap' in the queue will be preserved until the following application window.

7.17 Capacity reallocation for directly connected projects connecting between 2031 and 2035

7.17.1 The following approach applies to directly connected projects. See Section 7.18 for capacity reallocation for relevant embedded projects.

7.17.2 As outlined in Section 5.7, NESO and DNOs will initially align the queue to the 2035 pathway. Where there is undersupply against this pathway, Users will be able to apply in the next application window to address this undersupply.

7.17.3 Where a 2035 pathway project has been advanced to replace a 2030 pathway(s) project, the 2035 pathway project will be replaced by a new project applying to Gate 2 in a future application window. The undersupply calculated based on the initial queue alignment will be adjusted to account for projects that advance to align to the 2030 pathway(s).

7.17.4 Where a 2035 pathway project exits the queue entirely, **we will assess the reason for the project exiting the queue and allow SSEP to determine the optimal replacement for this capacity.** The undersupply calculated based on the initial queue alignment will not be adjusted to account for projects exiting the queue.

7.17.5 In the case of 7.17.4, acceleration of other projects that **already have a Gate 2 agreement** and are aligned to the 2035 pathway will also be considered where relevant. The project to be accelerated will be selected in line with the guidelines in sections 7.16.3 and 7.16.4.

7.17.6 This approach will apply to all application windows from the start of TMO4+ and is expected to apply until the SSEP is published.

7.18 Capacity reallocation for relevant embedded projects

7.18.1 Capacity reallocation for relevant embedded projects will continue to follow the existing Capacity Reallocation Process for Distribution, which will be updated prior to TMO4+ go-live to account for the CP30 Plan as described in sections 7.18.2 to 7.18.5.

7.18.2 Reallocation will only be permitted where it does not result in a CP30 pathway being exceeded. As such, the current process will be followed until this point, with capacity being reallocated to the next project that can be accommodated within the bounds of the scaling factors.

7.18.3 If reallocation is to another project that aligns to the same CP30 pathway as the exiting project (either 2030 or 2035), then this does not need to be a project of the same technology type, as this reallocation will not increase the total capacity level of the technology.

7.18.4 When a 2030 pathway(s) project exits the queue, where possible, capacity will continue to be reallocated until it facilitates a project from the 2035 pathway being advanced to align to the 2030 pathway(s). This advancing project can only be a project of the same technology type as the original exiting project, or a different technology which is also undersupplied against the 2030 pathway(s).

7.18.5 Where a 2035 pathway project exits the queue, acceleration of other projects that **already have a Gate 2 agreement** and are aligned to the 2035 pathway will also be considered where relevant.

7.18.6 This approach will apply to the first new application window under TMO4+ and is expected to apply until the SSEP is published.

Public

08. Interactions with Strategic Energy Planning Processes

This section provides an overview of the interaction between the CP30 Plan, SSEP, tCSNP and the Connections Network Design process.

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8.1 Interactions with strategic energy planning processes

8.1.1 The figure below shows the interaction with the CP30 Plan and SSEP, in the context of the overall CND process.

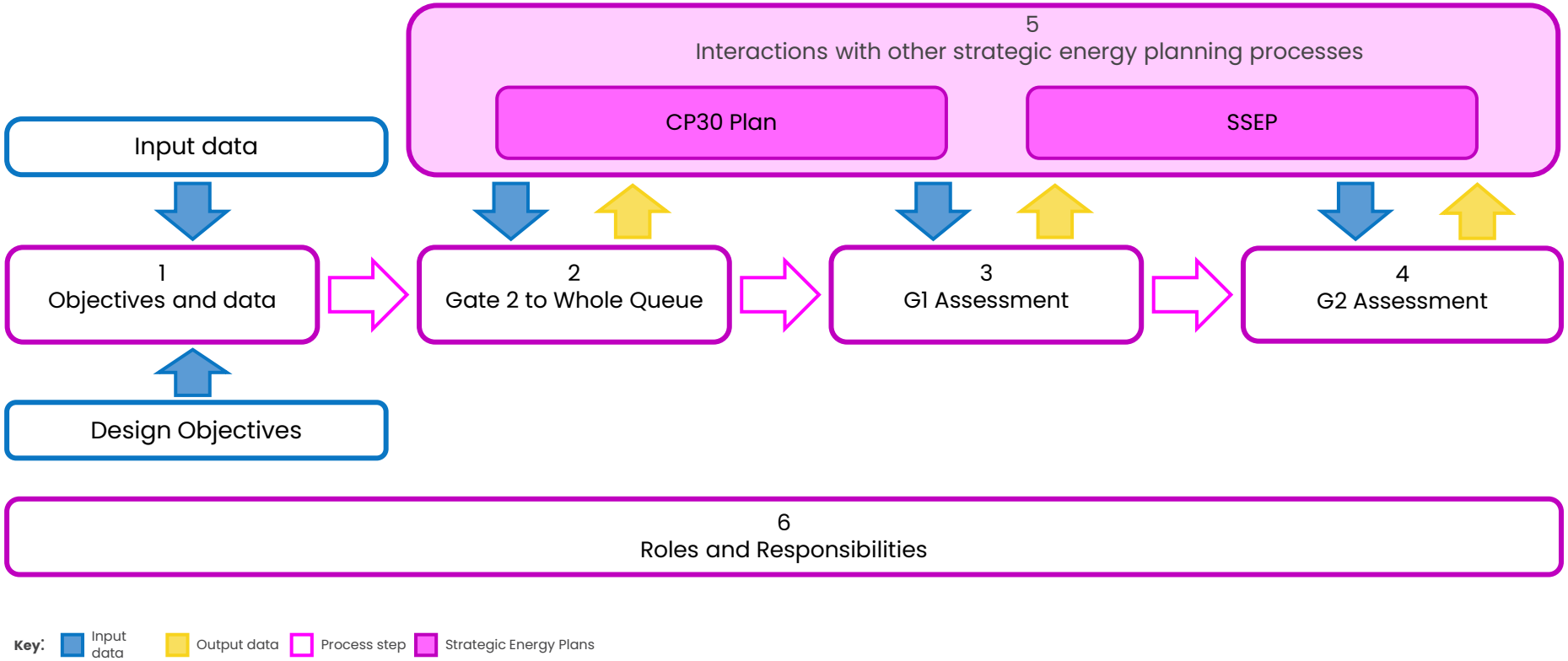

Figure 19: Interactions with strategic energy planning processes

8.2 Interaction between the CP30 Plan and CNDM

8.2.1 If the form and content of the CP30 Plan is not as NESO anticipates, the processes outlined in this document will be updated where required prior to TMO4+ go-live to facilitate CP30 Plan alignment.

8.3 Interaction between SSEP and CNDM

8.3.1 The first application window that opens following publication of the SSEP will align the queue to the pathway outlined in the SSEP.

8.3.2 Where an SSEP pathway specifies a lower capacity (for a technology, in a region) than the CP30 Plan, any Users with agreements that align to the CP30 Plan and not to SSEP will retain their agreements. **The SSEP pathway will not be applied retrospectively to amend existing agreements.**

8.3.3 Once the form and content of SSEP has been consulted on and confirmed, we will update the CNDM to describe how NESO, TOs and DNOs will align the queue to the SSEP Pathway. This will include a process for how applications for connections beyond 2035 will be added to the queue and assessed, and how capacity reallocation will be undertaken for each of the 5-year time horizons.

8.4 Interaction between tCSNP and CNDM

8.4.1 The first application window that opens following publication of the refreshed Transitional Centralised Strategic Network Plan will adopt the latest network assumptions from this plan.

8.4.2 Where outputs of the latest tCSNP studies are available prior to the final document being published, NESO will share relevant information with TOs to allow these to be taken into consideration in Gate 2 assessments as soon as possible.

8.4.3 If the tCSNP is updated during a Gate 2 assessment period, the network assumptions will, where possible, be accounted for in any outstanding studies in the ongoing Gate 2 assessment period.

Public

09. Roles and Responsibilities

This section defines the different roles and responsibilities between NESO, Transmission Owners and DNOs when using the methodology.

NESO
National Energy System Operator

9.1 Roles and Responsibilities

9.1.1 The figure below shows the roles and responsibilities in the context of the overall CND process.

9.1.2 The roles and responsibilities outlined in Sections 9.2 to 9.5 are in relation to CNDM only and therefore do not cover broader aspects of the process such as assessment of the Gate 2 Readiness criteria evidence, or the creation and issuing of TOCOs and Offers

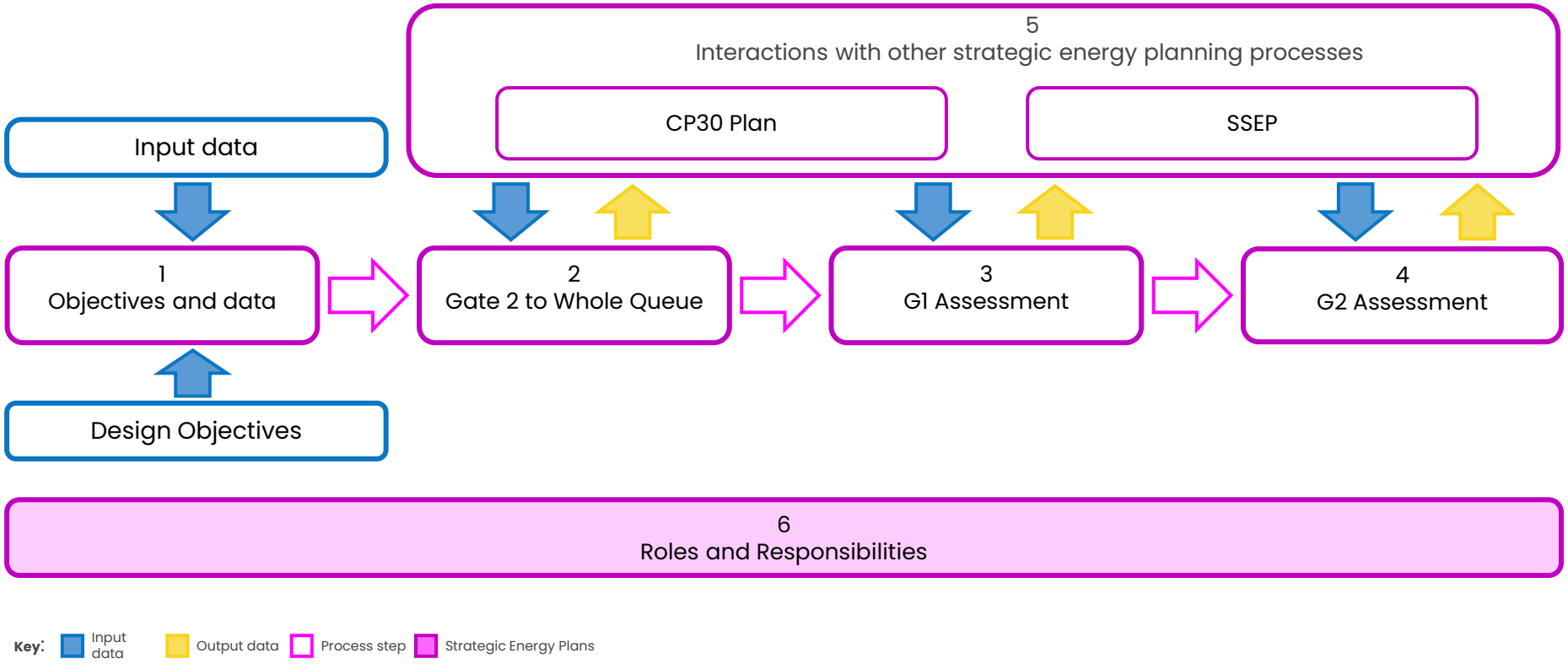

Figure 20: Roles and responsibilities in the context of the CND process

9.2 Role of NESO in the CNDM

9.2.1 NESO are responsible for the following when conducting the processes outlined in the CNDM:

1. Applying the Gate 2 Readiness Criteria to the existing Transmission queue and future Gate 2 applications
2. Applying the Gate 2 Strategic Alignment Criteria to the existing Transmission queue and future Gate 2 applications
3. Aligning the existing and future Transmission queue to the CP30 Plan
4. Working with TOs and DNOs to identify opportunities for addressing zonal imbalances and reserving for undersupply
5. Publishing the outcome of the Gate 2 Criteria and Gate 2 Strategic Alignment Criteria checks as soon as practicable
6. Identifying and selecting projects which require connection point and capacity reservation at Gate 1
7. Working with TOs to determine suitable projects for capacity reallocation
8. Providing CPAs to TOs to conduct Gate 2 assessments
9. Supplying TOs with the necessary project data to conduct Gate 2 assessments
10. Working with TOs to complete regional CION-type exercises and conduct supporting analysis
11. Facilitating engagement between TOs, DNOs and Users where required to agree design variations or other notable characteristics
12. Determining an indicative connection date and indicative connection location for projects which apply to Gate 1 and are not selected for connection point and capacity reservation at Gate 1

9.2.2 Obligations regarding the regular revision of CNDM and consulting on changes are expected to be included in NESOs licence.

9.3 Role of TOs in the CNDM

9.3.1 TOs are responsible for the following when conducting the processes outlined in the CNDM:

1. Reviewing the outcome of NESO's application of the Gate 2 Strategic Alignment Criteria to the existing Transmission queue and determining where advancement will not be possible (prior to detailed network study)
2. Determining locations where zonal imbalances can be addressed
3. Determining suitable sites for reserving connection points and capacity
4. Working with NESO to determine suitable projects for capacity reallocation
5. Conducting power system studies on the Gate 2 projects in the existing queue to identify changes to transmission reinforcement works and opportunities for advancement (Gate 2 to Whole Queue only)
6. Conducting power system studies on the applications in Gate 2 Tranche to determine new Transmission Reinforcement Work requirements, connection dates and connection points for each project.
7. Reviewing the indicative connection date and indicative connection location for projects which apply to Gate 1 and are not selected for Gate 1 connection point and capacity reservation, and providing feedback to NESO where necessary

9.3.2 Obligations regarding engaging with NESO to support the revision and development of the CNDM are expected to be included in TO licences.

9.4 Role of DNOs in the CNDM

9.4.1 DNOs are responsible for the following when conducting the processes outlined in the CNDM:

1. Applying the Gate 2 Readiness Criteria to relevant projects in the existing Distribution queue and future Gate 2 application windows
2. Applying the Gate 2 Strategic Alignment Criteria to relevant projects in the existing Distribution queue and future Gate 2 application windows
3. Aligning the existing and future Distribution queue to the CP30 Plan
4. Working with NESO and other DNOs to identify opportunities for addressing zonal imbalances and reserving for undersupply
5. Determining suitable projects for capacity reallocation
6. Sharing the outcome of the Gate 2 Criteria and Gate 2 Strategic Alignment Criteria checks with NESO
7. Publishing the outcome of the Gate 2 Criteria and Gate 2 Strategic Alignment Criteria checks as soon as practicable
8. Informing individual Users in cases where they have not met the Gate 2 Criteria
9. Supplying NESO (for onward sharing to the relevant TO) with the necessary project data to conduct Gate 2 assessments

9.5 Role of Transmission Connected IDNOs in the CNDM

9.5.1 Transmission Connected IDNOs are responsible for the following when conducting the processes outlined in the CNDM:

1. Applying the Gate 2 Readiness Criteria to projects for which the IDNO and the User have an existing agreement
2. Applying the Gate 2 Readiness Criteria to projects which apply directly to the IDNO in future
3. Informing NESO of the projects that have met the Gate 2 Readiness Criteria (for NESO to then apply the Gate 2 Strategic Alignment Criteria)
4. Informing individual Users in cases where they have not met the Gate 2 Criteria
5. Supplying NESO (for onward sharing to the relevant TO) with the necessary project data to conduct Gate 2 assessments

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10. Consultation Questions

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Consultation Guidance

We would like to hear your views

The following pages contain the key questions we would welcome views on in relation to the Connections Network Design Methodology. The main consultation question is shown in bold on each page, along with some more targeted prompt questions. Please respond to the main consultation questions and consider the prompt questions where relevant. An individual response to each prompt question is not required.

The **Overview Document** contains a summary of all the questions relating to Connections Reform and the three methodology documents.

Please provide your feedback by completing this Connections Reform Consultation Response Form or by completing this Connections Reform: Consultation Response Proforma and sending an electronic copy to box.connectionsreform@nationalenergyso.com by 5pm on the closing date of 2nd December 2024.

We will publish all consultation responses unless they are marked confidential. If you do not wish your response to be published, please clearly mark it as confidential. Please note even confidential responses will be shared with Ofgem. By responding you agree to our sharing your response with Ofgem.

To support you in your response and to answer any questions, we will be holding at least one webinar in November, which we encourage you to attend.

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Question 1 – Queue Formation

a) Do you agree with the approach to applying the Gate 2 Readiness Criteria and the Gate 2 Strategic Alignment Criteria to the existing queue? (see pages 24 and 29)

- Do you agree with the three categories of Planning Obtained, Planning Submitted, and Land Rights for sorting projects?
- Do you believe Phase 2 should remain in existing relative queue order, or should it also be reordered by planning status to determine alignment to the CP30 Plan?
- We have explored two alternatives, shown on pages 82 and 83? Would you support either of these alternatives over the proposed approach on page 29?

b) Do you agree with the approach to applying the Gate 2 Readiness Criteria and the Gate 2 Strategic Alignment Criteria to future Gate 2 Tranches? (see pages 56 to 58)

Alternative 1 – Current Queue Order

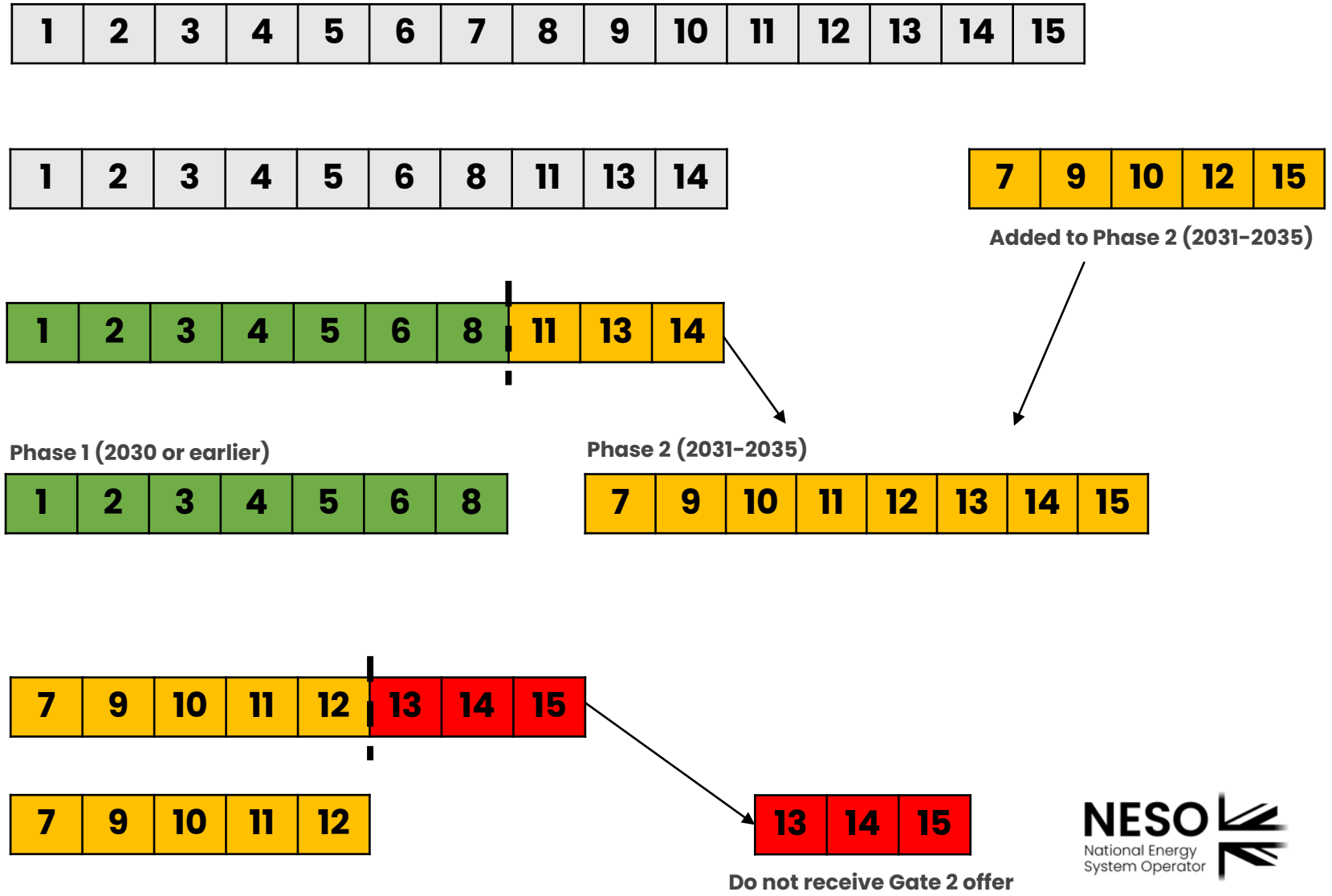
1. Form a sub-queue for each technology in each zone (e.g. short duration storage queue in Zone 1)

2. Remove those with existing connection dates after 2030 that have not requested advancement to 2030 or earlier and add to Phase 2.

3. Determine point in queue where 2030 pathway reached. Add any projects exceeding the pathway to Phase 2.

4. Relevant TO/DNO identify any network limitations preventing advancement (prior to detailed network study)

5. Determine point in Phase 2 queue where 2035 pathway reached. Any exceeding the pathway will not receive a Gate 2 offer.



Alternative 2 – Planning Status

1. Form a sub-queue for each technology in each zone (e.g. short duration storage queue in Zone 1)

2. Remove those with existing connection dates after 2030 that have not requested advancement to 2030 or earlier and add to Phase 2.

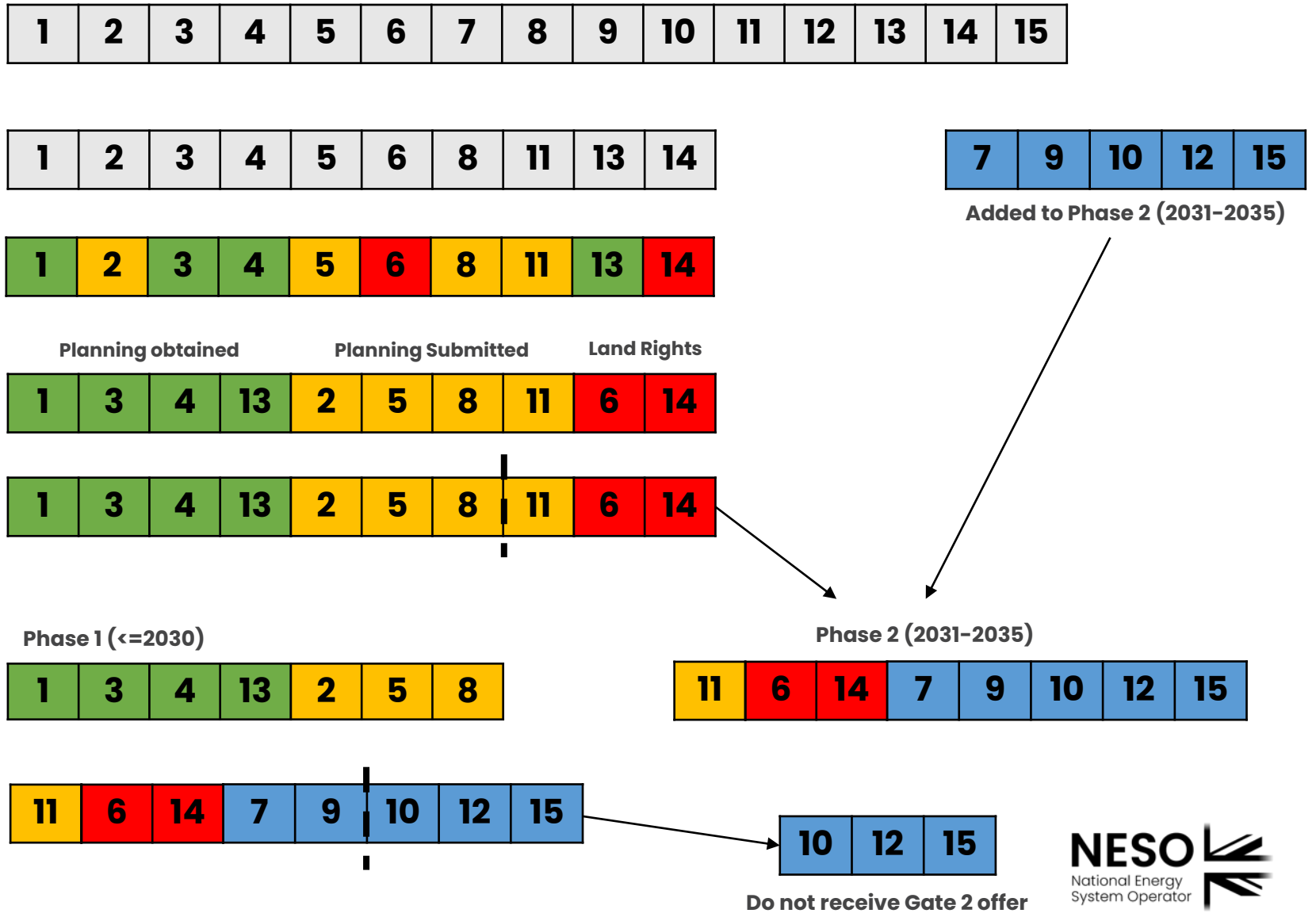
3. Determine planning status of remaining projects

4. Reorder queue based on planning status

5. Determine point in queue where 2030 pathway reached. Add any projects exceeding the pathway to Phase 2.

6. Relevant TO/DNO identify any network limitations preventing advancement (prior to detailed network study)

7. Determine point in Phase 2 queue where 2035 pathway reached. Any exceeding the pathway will not receive a Gate 2 offer.



Question 2 – Advancement Requests

Do you agree with the approach to managing advancement requests?

- Do you agree with taking advancement requests into consideration when reordering the existing queue?
- Do you agree with the limited circumstances under which NESO would permit Users to request reversion to their original connection date?

Question 3 – Connection Point and Capacity Reservation

Do you agree with the approach to reserving Connection Point and Capacity at Gate 1?

- Do you agree with the concept of reserving for undersupply against the CP30 Plan pathway(s) to 2030?
- Do you agree with the circumstances under which NESO could reserve a Connection Point and Capacity for a known project?
- Do you agree with the circumstances under which NESO could reserve a Connection Point and Capacity for an as yet unknown project?

Question 4 – Capacity Reallocation

a) **Do you agree with the approach to reallocating capacity when 2030 pathway projects exit the queue?**

b) **Do you agree with the approach to reallocating capacity when 2035 pathway projects exit the queue?**

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11. Appendix

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Appendix 1: CNDM abbreviations

List of abbreviations used across this document.

Abbreviation	Meaning	Abbreviation	Meaning
CATO	Competitively Appointed Transmission Owner	**OHA**	Offshore Hybrid Asset
CND	Connections Network Design	**PoC**	Point of Connection
CNDM	Connections Network Design Methodology	**RESP**	Regional Energy Strategic Plan
CPA	Construction Planning Assumptions	**SBN**	Scheme Briefing Note
CSNP	Centralised Strategic Network Plan	**SGT**	Super Grid Transformer
CUSC	Connection and Use of System Code	**SQSS**	Security and Quality of Supply Standard
DNO	Distribution Network Operators	**SSEP**	Strategic Spatial Energy Plan
DRC	Data Registration Code	**tCSNP**	Transitional Centralised Strategic Network plan
FES	Future Energy Scenarios	**TMO4+**	Target Model Option (TMO4 is core foundational process)
GSP	Grid Supply Point	**TO**	Transmission Owner
HND	Holistic Network Design (HND)	**TOCO**	Transmission Owner Construction Offer

Appendix 2: Key CNDM Terminologies

Detailed description of terminologies mentioned throughout this document.

Terminologies	Description
Enabling Works	The transmission reinforcement works which need to be completed before a generator can connect without temporary restrictions on availability (either enduring non-firm or firm).
Enduring Non-Firm	Also known as a Design Variation or Customer Choice connection. This means the User has accepted a connection which will never be fully firm. This is most commonly a single point of connection to the transmission system (as opposed to a double busbar connection), which means for the outage of that piece of transmission equipment the user will be disconnected and not compensated. There could however be other enduring non-firm arrangements.
Firm	An offer that has no restrictions on availability, other than those that can be imposed under the codes (e.g. cat2 and cat4 intertrips). This is the default assumption for a connection, and Users have a right to insist on a firm connection. These Users can still be taken off the system as needed, but only through commercial trading or Balancing Mechanism actions (outside of emergency conditions) and so are compensated for those actions.
Temporary Non-Firm	These are temporary restrictions that apply from a certain date until another date or until certain works are completed. This is most commonly as a result of the User wishing to connect ahead of the earliest firm connection date that can be provided and means that until that firm date the User accepts the temporary restrictions. Note that a party can have both temporary and enduring non-firm restrictions. This will mean that both sets of restrictions initially apply, then at a certain date or when certain works are complete the temporary restrictions will cease to apply, but the enduring ones will remain. There can also be stages of temporary restrictions where the restrictions change but are not yet entirely removed until another later date.
Wider Works	All other (non-Enabling Works) transmission reinforcement works associated with accommodating the new generator to ensure compliance with the Security and Quality of Supply Standards (SQSS).